LG
Life's Good

ENGLISH

OWNER'S MANUAL
MONITOR TV

Please read this manual carefully before operating your set and retain it for future reference.

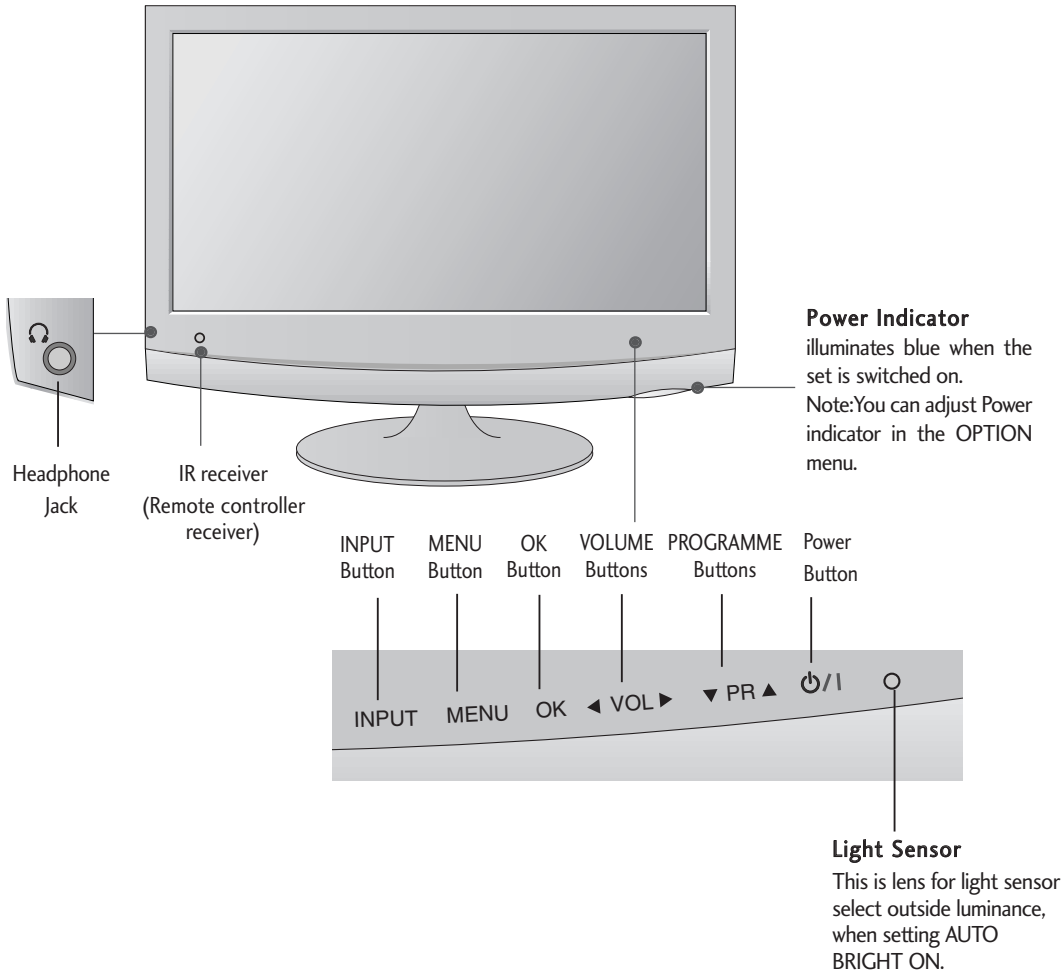
MONITOR TV MODELS
M1962D
M2062D
M2262D
M2362D
M2762D

www.lge.com

PREPARATION

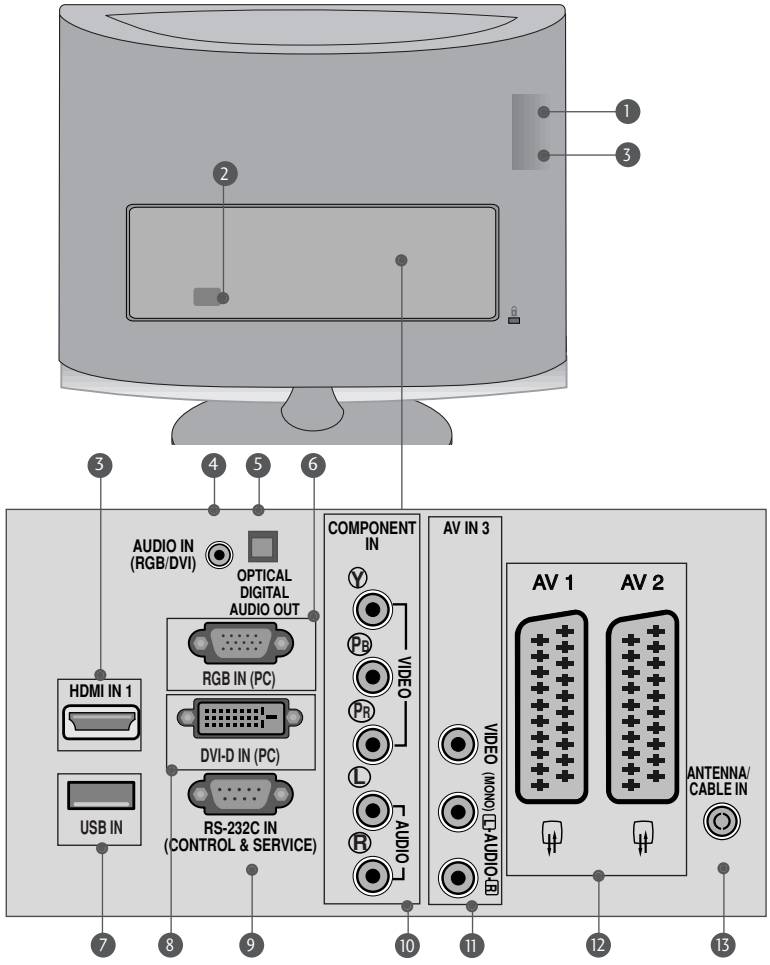
FRONT PANEL CONTROLS

■ This is a simplified representation of the front panel. The image shown may be somewhat different from your set.



BACK PANEL INFORMATION

- This is a simplified representation of the back panel. The image shown may be somewhat different from your set.



❶ **PCMCIA (Personal Computer Memory Card International Association) Card Slot**
This feature is not available in all countries.

❷ **Power Cord Socket**
This set operates on AC power. The voltage is indicated on the Specifications page. Never attempt to operate the set on DC power.

❸ **HDMI Input (Not Support PC)**
Connect a HDMI signal to HDMI IN.
Or DVI (VIDEO) signal to HDMI IN with DVI to HDMI cable.

❹ **RGB/DVI Audio Input**
Connect the audio from a PC.

❺ **Optical Digital Audio Out**
Connect digital audio from various types of eguipment

❻ **RGB INPUT (PC)**
Connect the output from a PC.

❼ **USB IN**

❽ **DVI-D Input**
Connect the output from a PC.

❾ **RS-232C IN (CONTROL & SERVICE) PORT**
Connect to the RS-232C port on a PC.

❿ **Component Input**
Connect a component video/audio device to these jacks.

⓫ **Audio/Video Input**
Connect audio/video output from an external device to these jacks.

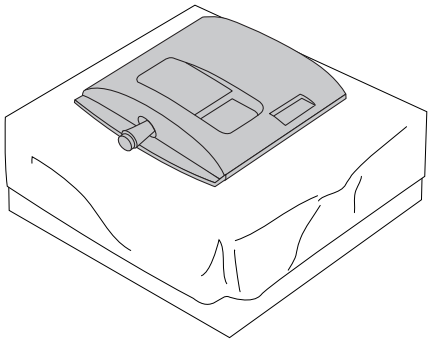
⓬ **Euro Scart Socket (AV1/AV2)**
Connect scart socket input or output from an external device to these jacks.

⓭ **Antenna Input**
Connect over-the-air signals to this jack.

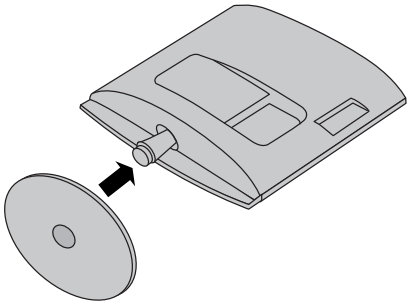
STAND INSTALLATION

■ The image shown may be somewhat different from your set.

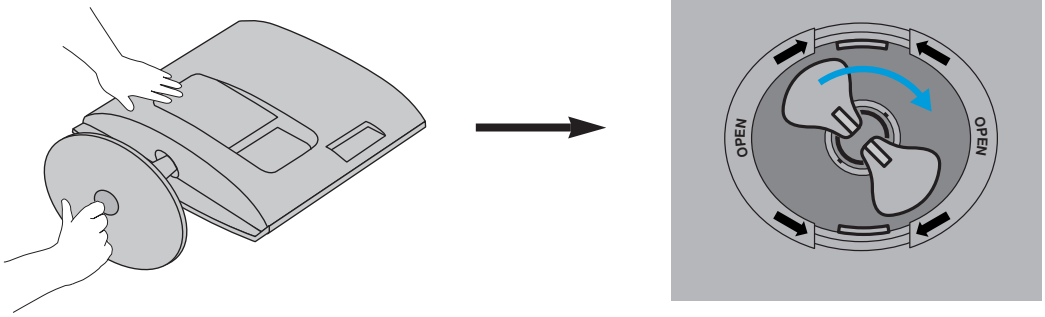
1 Carefully place the product screen side down on a cushioned surface that will protect product and screen from damage.



2 Insert the **stand base** into the product



3 Turn the Stand Base Lock through 90° to fix the Stand Base to the Stand Body.



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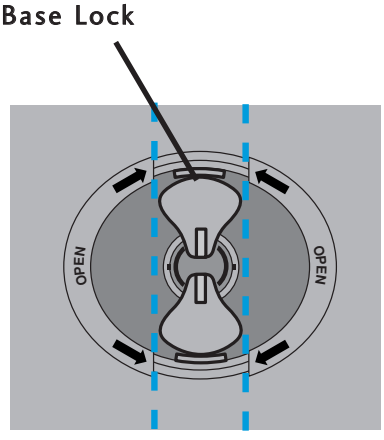

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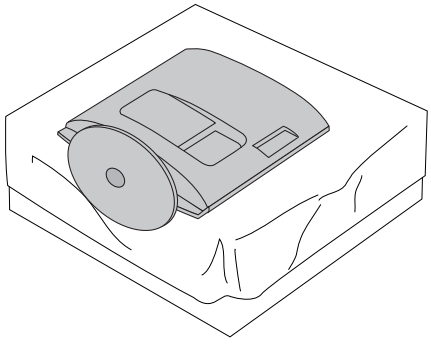
5



EXTERNAL EQUIPMENT SETUP

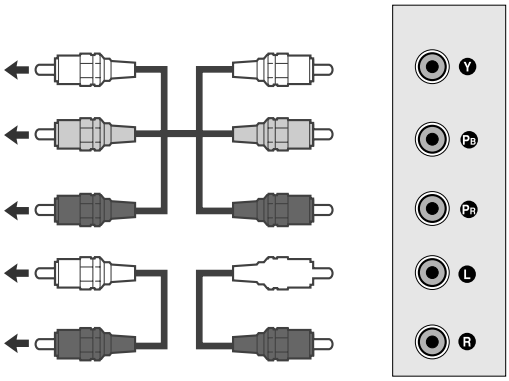
- To prevent the equipment damage, never plug in any power cords until you have finished connecting all equipment.
- The image shown may be somewhat different from your set.

HD RECEIVER SETUP

When connecting with a component cable

1. Connect the SET-TOP outputs to the **COMPONENT IN VIDEO** sockets (Y P_B P_R) on the set.
2. Connect the audio cable from the SET-TOP to **COMPONENT IN AUDIO** sockets of the set.
3. Press the **INPUT** button to select **Component.**

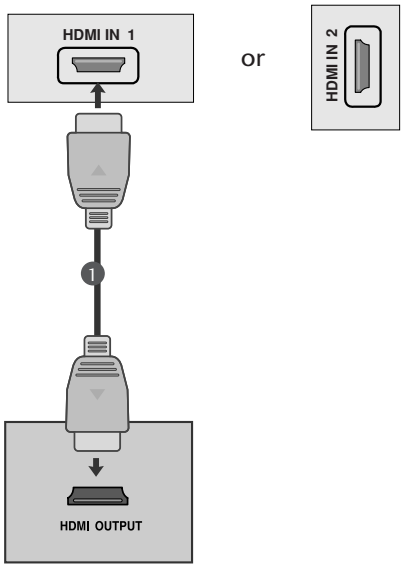
Signal	Component	HDMI
480i/576i	Yes	No
480p/576p	Yes	Yes
720p/1080i	Yes	Yes
1080p	Yes	Yes



EXTERNAL EQUIPMENT SETUP

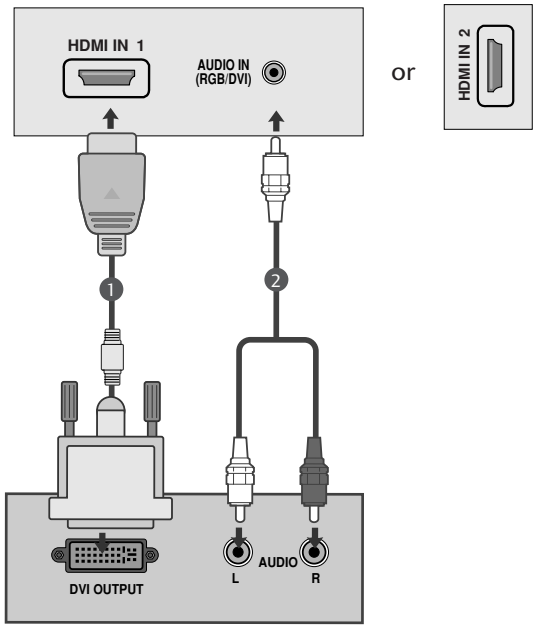
When connecting with a HDMI

1. Connect the HDMI output of the digital set-top box to the **HDMI IN** jack on the set.



When connecting with a HDMI to DVI cable

1. Connect the digital set-top box to **HDMI IN** jack on the set.
2. Connect the audio output of the digital set-top box to the **AUDIO IN (RGB/DVI)** jack on the set.
3. Turn on the digital set-top box. (Refer to the owner's manual for the digital set-top box.)



NOTE

► HDMI Input does not support PC mode. If it is connected PC, the screen may not be displayed properly.

DVD SETUP

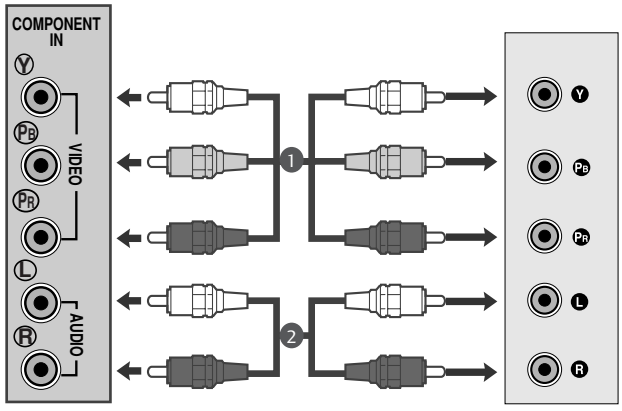
When connecting with a component cable

1. Connect the video output sockets (Y P_B P_R) of the DVD to the **COMPONENT IN VIDEO** sockets (Y P_B P_R) of the set.
2. Connect the audio cable from the DVD to **COMPONENT IN AUDIO** sockets of the set.
3. Press the **INPUT** button to select **Component**.
4. Press the **PLAY** button on the DVD.
   The DVD playback picture appears on the screen.

Component Input ports

To get better picture quality, connect a DVD player to the component input ports as shown below.

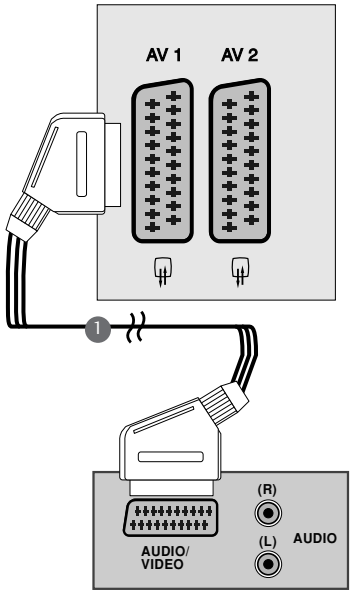
Component ports on the set	Y	P_B	P_R
Video output ports on DVD player	Y	P_B	P_R
	Y	B-Y	R-Y
	Y	Cb	Cr
	Y	Pb	Pr



EXTERNAL EQUIPMENT SETUP

When connecting with a Euro Scart[DVD]

1. Connect the Euro scart socket of the DVD to the Euro scart socket of the set.
2. Press the **INPUT** button to select **AV1**.
   If connected to **AV2** Euro scart socket, select **AV2** input source.
3. Press the **PLAY** button on the DVD.
   The DVD playback picture appears on the screen.

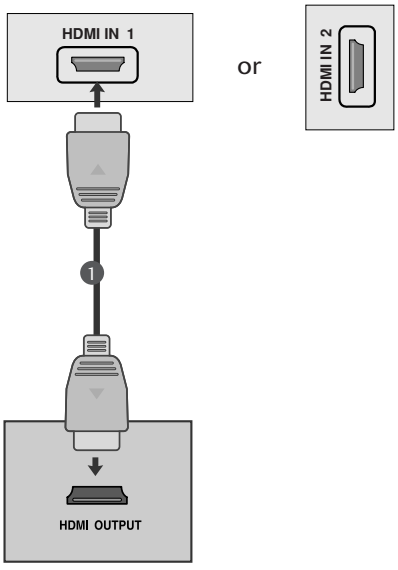


NOTE

- Signal type RGB, i.e. the signals red, green and blue can only be selected for the Euro scart and the AV 1 can be received. These signals are transmitted, for example, by a paid TV decoder, game machine or photo CD unit, etc.
- Please use shielded scart cable.

When connecting HDMI cable

1. Connect the HDMI output of the DVD to the **HDMI IN** jack on the set.



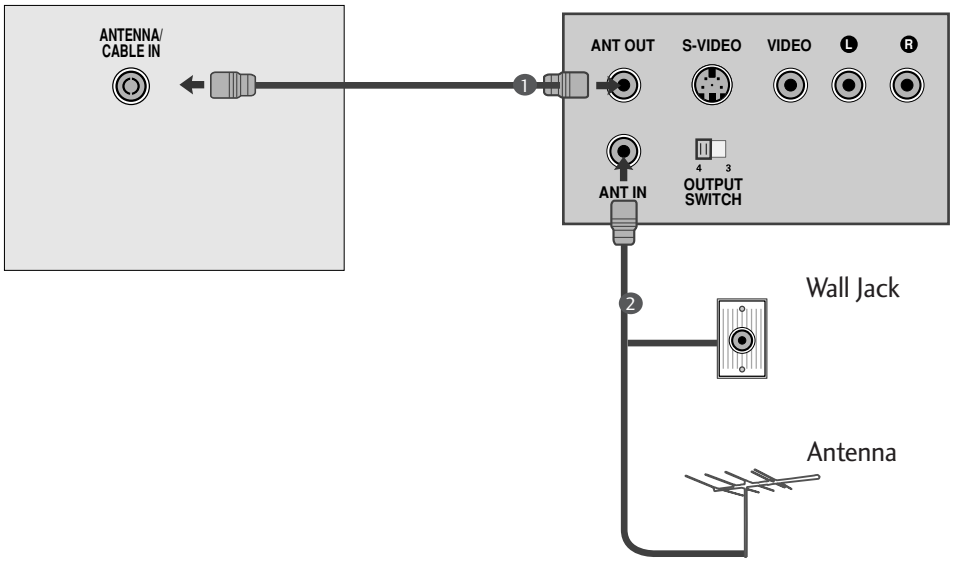
NOTE

- Set can receive the video and audio signal simultaneously by using a HDMI cable.
- If the DVD player does not support Auto HDMI, you need to set the DVD output resolution appropriately.

VCR SETUP

- To avoid picture noise (interference), leave an adequate distance between the VCR and set.
- Typically a still picture is shown on the VCR. If a user uses 4:3 picture format for a long time, an afterimage may remain on the sides of the screen.

When connecting with an antenna

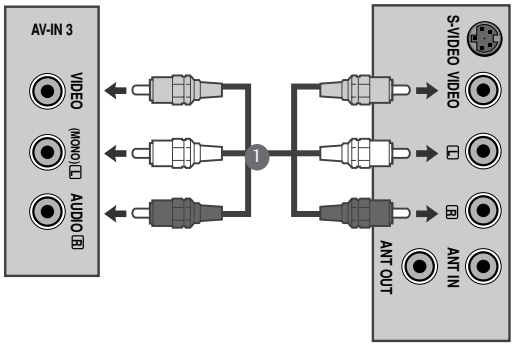


1. Connect the RF out socket of the VCR to the aerial socket of the set.
2. Connect the aerial cable to the RF aerial in socket of the VCR.
3. Store the VCR channel on a desired programme number using the 'Manual programme tuning' section.
4. Select the programme number where the VCR channel is stored.
5. Press the **PLAY** button on the VCR.

EXTERNAL EQUIPMENT SETUP

When connecting with a RCA cable

1. Connect the audio/video out sockets of the VCR to AUDIO/VIDEO in sockets of the set.
2. Press the INPUT button to select AV3.
3. Press the PLAY button on the VCR.
   The VCR playback picture appears on the screen.

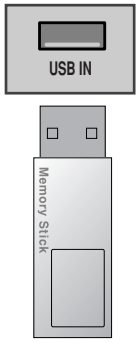


NOTE

► If you have a mono VCR, connect the audio cable from the VCR to the AUDIO L/MONO jack of the set.

USB SETUP

1. Connect the USB device to the **USB IN** jacks on the side of set.
2. After connecting the **USB IN** jacks, you use the **USB** function. (► **p.92**)

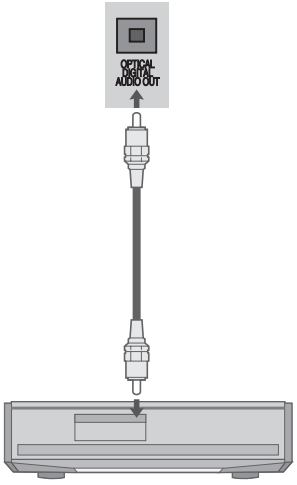


DIGITAL AUDIO OUT SETUP

Sending the TV's audio signal to external audio equipment via the Digital Audio Output (Optical) port.
If you want to enjoy digital broadcasting through 5.1-channel speakers, connect the OPTICAL DIGITAL AUDIO OUT terminal on the back of TV to a DVD Home Theater (or amp).

1. Connect one end of an optical cable to the TV Digital Audio (Optical) Output port.
2. Connect the other end of the optical cable to the digital audio (Optical) input on the audio equipment.

   Set the **"TV Speaker option - Off "** in the AUDIO menu.(► **p.71**). Refer to the external audio equipment instruction manual for operation.



CAUTION

► Do not look into the optical output port. Looking at the laser beam may damage your vision.

EXTERNAL EQUIPMENT SETUP

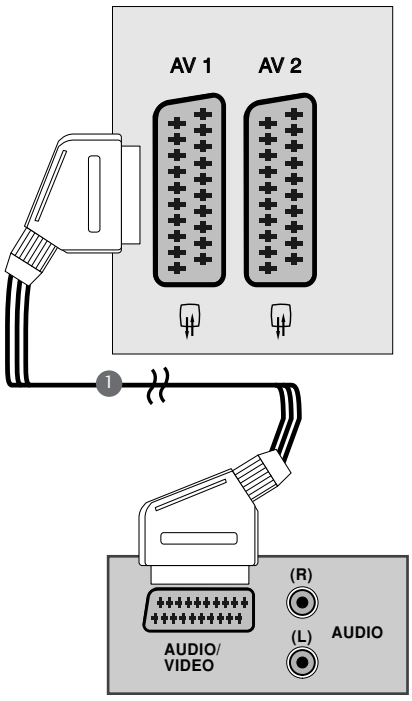
When connecting with a Euro Scart[VCR]

1. Connect the Euro scart socket of the VCR to the Euro scart socket of the set.

2. Press the **PLAY** button on the VCR.
If your VCR outputs an AV switching signal via the Scart lead, the set will auto switch to **AV 1** mode on start of playback, but if you want to keep on watching in TV mode, press the ▲ / ▼ or NUMBER buttons.
If connected to **AV2** Euro scart socket, select **AV2** input source.

   Otherwise press the **INPUT** button on the remote control handset to select **AV 1**. The VCR playback picture appears on the screen.

   You can also record programmes received by the set on video tape.



NOTE

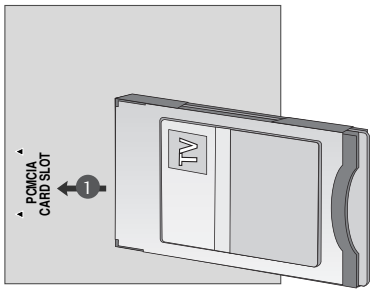
- Signal type RGB, i.e. the signals red, green and blue can only be selected for the Euro scart and the AV 1 can be received. These signals are transmitted, for example, by a paid TV decoder, game machine or photo CD unit, etc.
- Please use shielded scart cable.

INSERTION OF CI MODULE

- **To view the scrambled (paid) services in digital TV mode.**
- **This feature is not available in all countries.**

1. Insert the CI Module to **PCMCIA** (Personal Computer Memory Card International Association) **CARD SLOT** of set as shown.

   For further information, see p. 40.

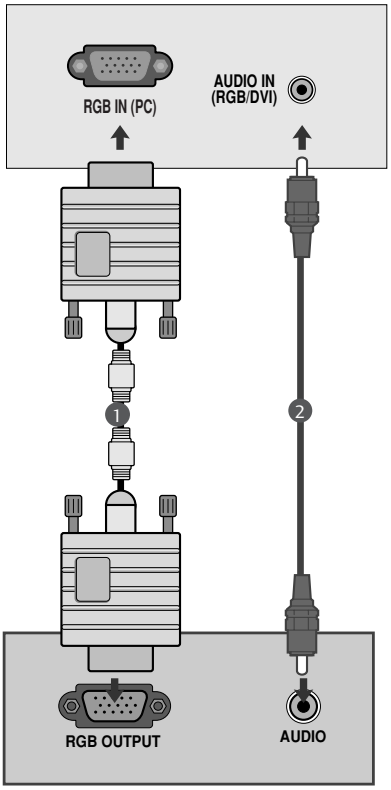


PC SETUP

This product provides Plug and Play capability, meaning that the PC adjusts automatically to the set's settings.

When connecting with a D-sub 15 pin cable

1. Connect the signal cable from the monitor output socket of the PERSONAL COMPUTER to the PC input socket of the set.
2. Connect the audio cable from the PC to the **AUDIO IN (RGB/DVI)** sockets of the set.
3. Press the INPUT button to select **RGB**.
4. Switch on the PC, and the PC screen appears on the set. The set can be operated as a PC monitor.

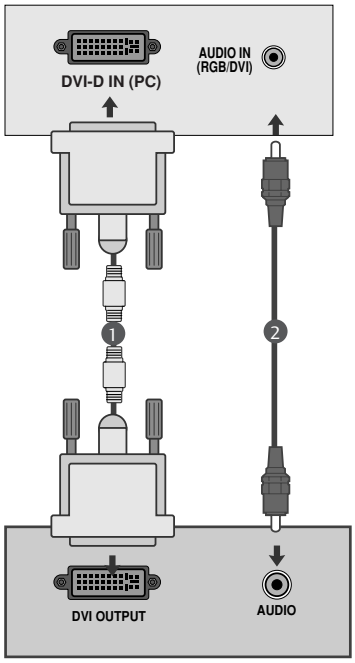


NOTE

- You must use shielded signal interface cables (D sub 15 pin cable, DVI cable) with ferrite cores to maintain standard compliance for the product.

When connecting with a DVI cable

1. Connect the DVI output of the PC to the **DVI-D IN** jack on the set.
2. Connect the audio cable from the PC to the **AUDIO IN (RGB/DVI)** sockets of the set.

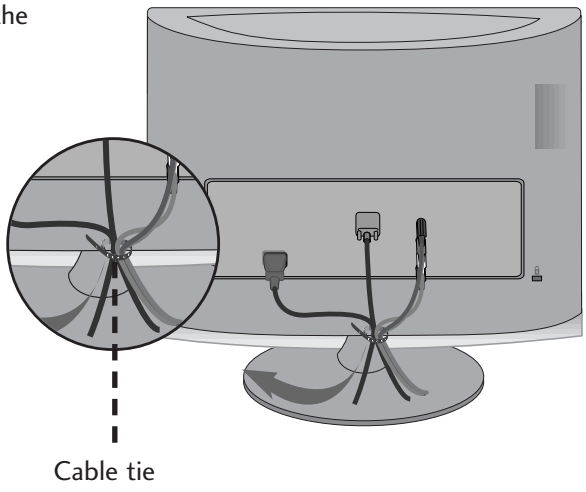


NOTE

- If the set is cold, there may be a small “flicker” when the set is switched on. This is normal, there is nothing wrong with the set.
- If possible, use the 1360x768 @ 60 Hz video mode to obtain the best image quality for your LCD monitor. If used with other resolutions, some scaled or processed pictures may appear on the screen. The set has been preadjusted to the mode 1360 x 768 @ 60 Hz.**(M1962D)**
- If possible, use the 1600 x 900 @ 60 Hz video mode to obtain the best image quality for your LCD monitor. If used with other resolutions, some scaled or processed pictures may appear on the screen. The set has been preadjusted to the mode 1600 x 900 @ 60 Hz.**(M2062D)**
- If possible, use the 1920 x 1080 @ 60 Hz video mode to obtain the best image quality for your LCD monitor. If used with other resolutions, some scaled or processed pictures may appear on the screen. The set has been preadjusted to the mode 1920 x 1080 @ 60 Hz. **(M2262D/M2362D/M2762D)**
- Some dot defects may appear on the screen, like Red, Green or Blue spots. However, this will have no impact or effect on the monitor performance.
- Do not press the LCD screen with your finger for a long time as this may produce some temporary distortion effects on the screen.
- Avoid keeping a fixed image on the set’s screen for prolonged periods of time. The fixed image may become permanently imprinted on the screen; use a screen saver when possible.

BACK COVER FOR WIRE ARRANGEMENT

Tie cables together with a cable tie as shown in the illustration.



EXTERNAL EQUIPMENT SETUP

RGB/DVI[PC]

<M1962D>

Resolution	Horizontal Frequency(kHz)	Vertical Frequency(Hz)
640x480	31.469	60
	37.5	75
800x600	37.879	60
	46.875	75
1024x768	48.363	60
	60.123	75
1280x768	47.776	60
1280x800	49.306	60
1360x768	47.712	60
	47.7	60

<M2062D>

Resolution	Horizontal Frequency(kHz)	Vertical Frequency(Hz)
720x350	25.175	70
720x400	31.468	70
640x480	31.469	60
	37.5	75
800x600	37.879	60
	46.875	75
832x624	49.725	65
1024x768	48.363	60
	60.123	75
1152x870	68.681	75
1280x1024	63.981	60
1280x1024	79.976	75
1600x900	60	60

<M2262D/M2362D/M2762D>

Resolution	Horizontal Frequency(kHz)	Vertical Frequency(Hz)
720x400	31.468	70
640x480	31.469	60
	37.500	75
800x600	37.879	60
	46.875	75
1024x768	48.363	60
	60.123	75
1152x864	67.500	75
1280x1024	63.981	60
	79.976	75
1680x1050	64.674	60
	65.290	60
1600x1200	75.000	60
1920x1080	66.587	60

HDMI[DTV] (Not Support PC)

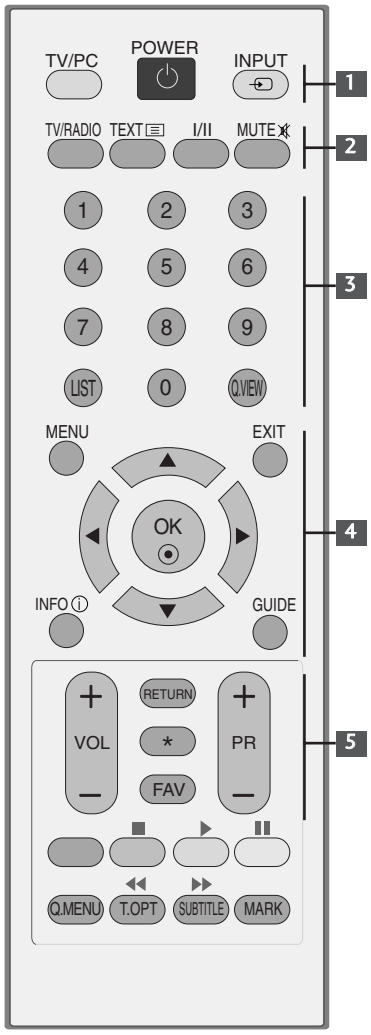
Resolution	Horizontal Frequency(kHz)	Vertical Frequency(Hz)
720x480/60p	31.469	60
	31.5	60
720x576/50p	31.25	50
1280x720/50p	37.5	50
1280x720/60p	44.96	60
	45	60
1920x1080/60i	33.72	60
	33.75	60
1920x1080/50i	28.125	50
1920x1080/24p	27	24
1920x1080/30p	33.75	30
1920x1080/50p	56.25	50
1920x1080/60p	67.43	60
	67.5	60

WATCHING TV /PROGRAMME CONTROL

REMOTE CONTROL KEY FUNCTIONS

When using the remote control, aim it at the remote control sensor on the set.

A TYPE



1

- POWER — Switches the set on or off.
- TV/PC — Selects TV or PC mode.
- INPUT — External input mode rotates in regular sequence.

2

- TV/RADIO — Selects Radio or TV channel.
- I/II — Selects the sound output.(Refer to the p.73~74)
- MUTE — Switches the sound on or off.

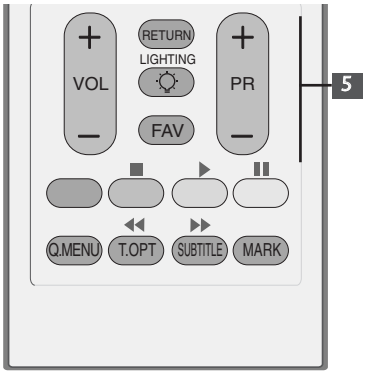
3

- 0~9 number button — Selects a programme. Selects numbered items in a menu.
- LIST — Displays the programme table.(Refer to the p.41)
- Q.VIEW — Returns to the previously viewed programme.

4

- MENU — Selects a menu. (Refer to the p.30)
- EXIT — Clears all on-screen displays.
- INFO ⓘ — Shows the present screen information.
- GUIDE — Shows programme schedule.(Refer to the p.42~45)
- THUMBSTICK (Up/Down/Left/Right) — Allows you to navigate the on-screen menus and adjust the system settings to your preference.
- OK — Accepts your selection or displays the current mode.

B TYPE

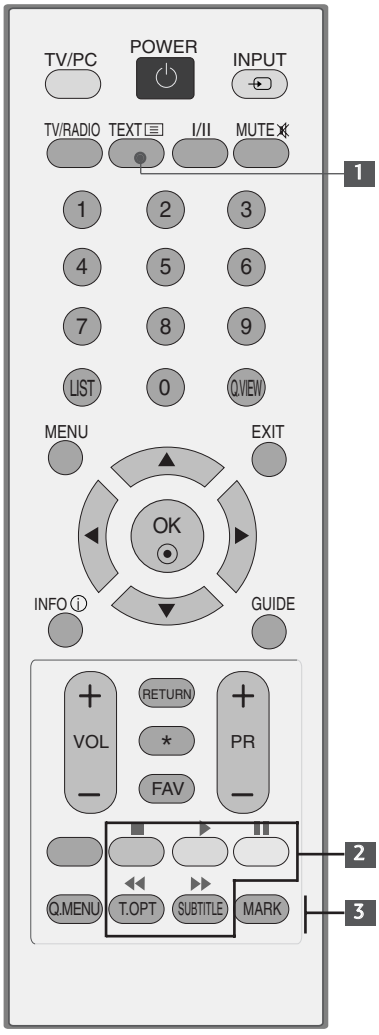


5

- VOLUME UP /DOWN — Adjusts the volume.
- RETURN — Allows the user to move back one step in an interactive application, EPG or other user interaction function.
- * LIGHTING — A TYPE : No function. B TYPE : Press the Lighting button to turn the decoration lighting on/off.
- FAV — Displays the selected favourite programme.(Refer to the p.41)
- Programme UP/DOWN — Selects a programme.

WATCHING TV /PROGRAMME CONTROL

A TYPE



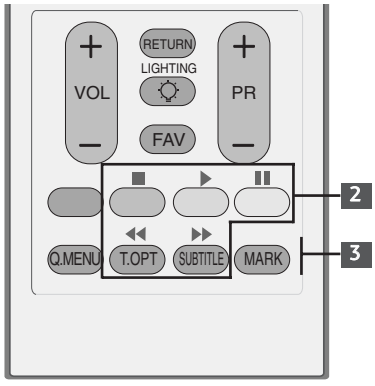
1 TELETEXT BUTTONS — These buttons are used for teletext. For further details, see the 'Teletext' section. (Refer to the p.100~102)

2 USB Menu control buttons — Controls USB menu (Photo List and Music List) (Refer to the p.92)

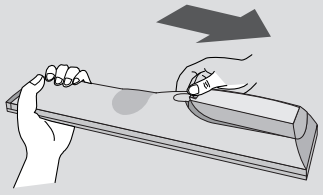
3 Q.MENU — Select the desired quick menu source. (Refer to the p.29)

MARK — Check and un-check programmes in the recorded set menu.

B TYPE



Installing Batteries



- Open the battery compartment cover on the back and install the batteries matching correct polarity (+ with +, - with -).
- Install two 1.5 V AAA batteries. Don't mix old or used batteries with new ones.
- Close cover.
- To remove the batteries, perform the installation actions in reverse.

TURNING ON THE TV

- When your TV is turned on, you will be able to use its features.

1 Firstly,connect the power cord correctly and check the main power(⏻ / I)on the TV.

2 **Set ID : Off**

In standby mode to turn TV on, press the INPUT or PR ▲ / ▼ button on the TV or press the POWER button on the remote control and the TV will switch on.

Set ID : On

In standby mode to turn TV on,pr ss the INPUT or PR ▲ / ▼ button on the TV or press the POWER, INPUT, PR +/- or NUMBER button on the remote control and the TV will switch on.

Initializing setup

If the OSD (On Screen Display) is displayed on the screen after turning on the TV, you can adjust the **Language**, **Mode Setting**, **Country**, **Auto tuning**.

Note:

a. If you close without completing the initial setting, the Initial Setting menu can be displayed again.
b. Press the RETURN button to change the current OSD to the previous OSD.
c. For those countries without confirmed DTV broadcasting standards, some DTV featur s might not work, depending on the DTV broadcasting environment.
d. "**Home Use**" mode is the optimal setting for home environments, and is the TV's default mode.
e. "**Store Demo**"mode is the optimal setting for store environments. If a user modifies image quality data, "**Store Demo**" mode initializes the product to the image quality set by us after a certain period of time.
f. The mode (**Home Use**, **Store Demo**) can be changed by executing **Mode Setting** in the **OPTION** menu.

PROGRAMME SELECTION

1 Press the **PR +** or **-** or NUMBER buttons to select a programme number.

VOLUME ADJUSTMENT

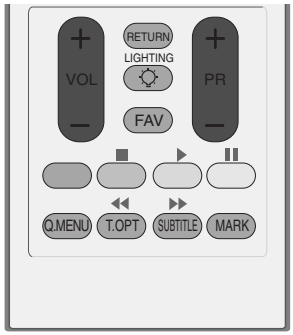
1 Press the VOL **+** or **-** button to adjust the volume.

If you want to switch the sound off, press the MUTE button.

You can cancel this function by pressing the MUTE, VOL **+** or **-**, or I/II button.

A TYPE

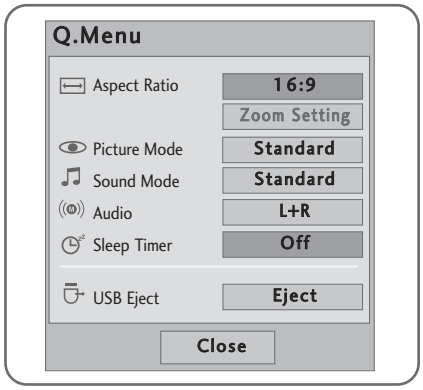
B TYPE

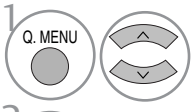


QUICK MENU

Your TV's OSD (On Screen Display) may differ slightly from that shown in this manual.
Q.Menu (Quick Menu) is a menu of features which users might use frequently.

- **Aspect Ratio**: Selects your desired picture format. For Zoom Setting, select 14:9, Zoom and Cinema Zoom in Ratio Menu. After completing Zoom Setting, the display goes back to Q.Menu.
- **Picture Mode** : Selects your desired Picture Mode.
- **Sound Mode** : It is a feature to automatically set the sound combination which it deems the best for the images being watched. Selects your desired Sound Mode.
- **Audio** : Selects the sound output.
- **Sleep Timer** : Sets the sleep timer.
- **USB Eject** : Selects "USB Eject" in order to eject USB device.





Display each menu.

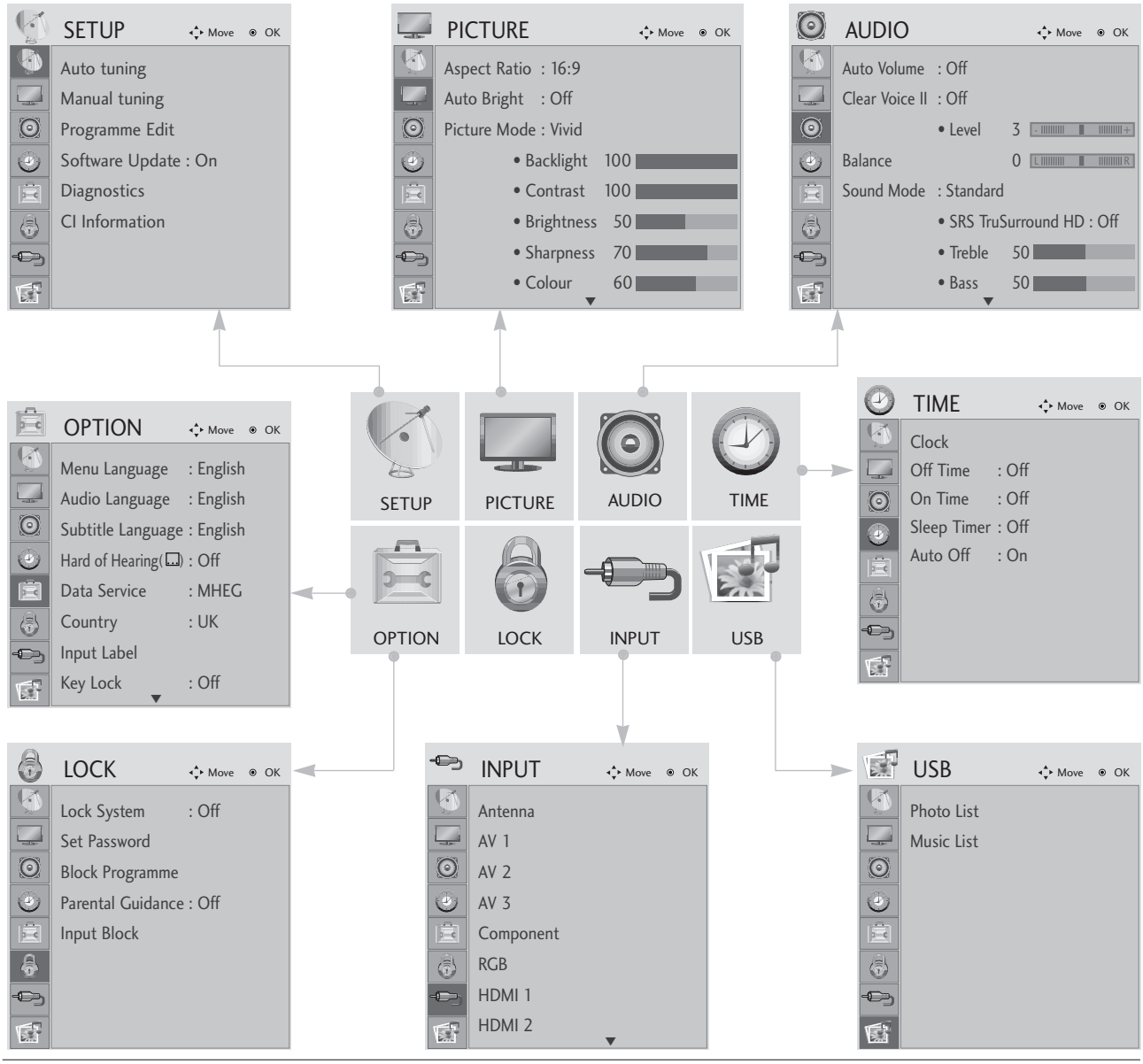
Select your desired Source.

• Press the RETURN button to move to the previous menu screen.

WATCHING TV /PROGRAMME CONTROL

ON SCREEN MENUS SELECTION AND ADJUSTMENT

Your set's OSD (On Screen Display) may differ slightly from what is shown in this manual.



1 MENU — Display each menu.

2 OK — Select a menu item.

3 OK — Move to the pop up menu.

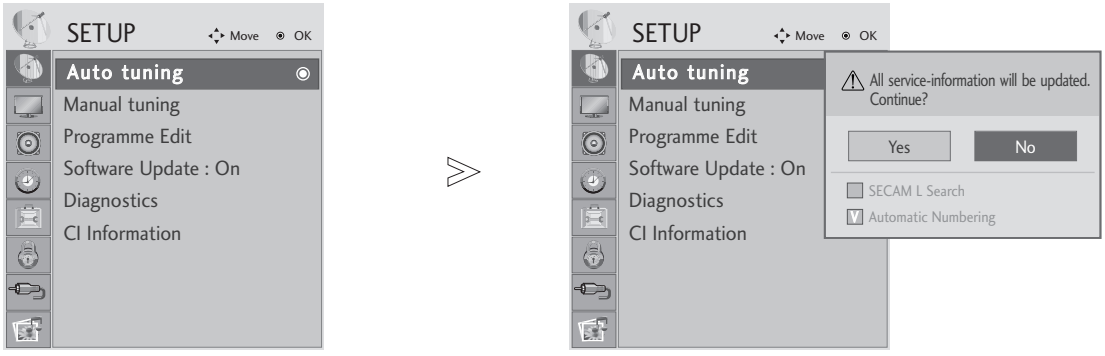
- Press the MENU or EXIT button to close the menu window.
- Press the RETURN button to move to the previous menu screen.

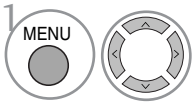
AUTO PROGRAMME TUNING

Use this to automatically find and store all available programmes.

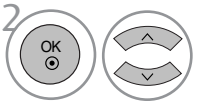
When you start auto programming in digital mode, all previously stored service information will be deleted.

The maximum number of programmes that can be stored is 500. But the number may differ slightly depending on broadcasting signals.

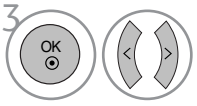




Select **SETUP**.



Select **Auto Tuning**.



Select **Yes**.

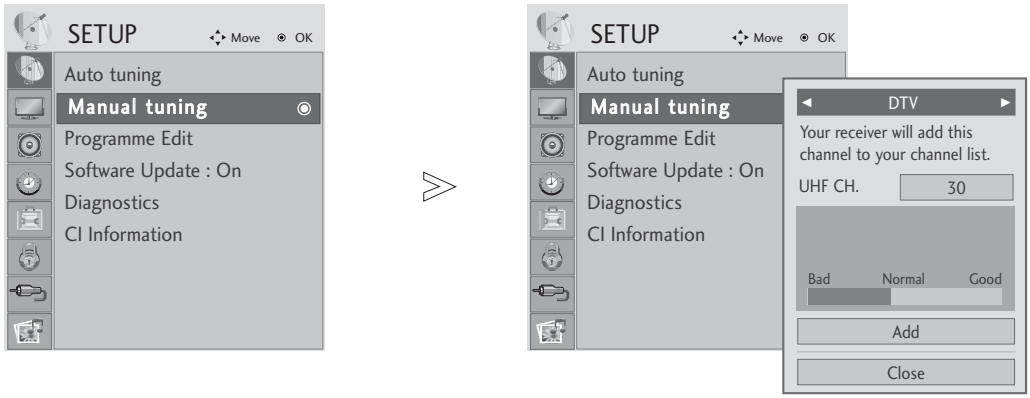
Run Auto tuning.

- Use NUMBER buttons to input a 4-digit password in Lock System 'On'.
- If you wish to keep on auto tuning, select YES using the ◄ ► button. Then, press the OK button. Otherwise, select NO.
- Automatic Numbering: Decide whether to use the programme numbers as sent by broadcasting stations for tuning.

- Press the MENU or EXIT button to close the menu window.
- Press the RETURN button to move to the previous menu screen.

MANUAL PROGRAMME TUNING (IN DIGITAL MODE)

Manual Tuning lets you manually add a programme to your programme list.



1 MENU

Select **SETUP**.

2 OK

Select **Manual Tuning**.

3 OK

Select **DTV**.

4

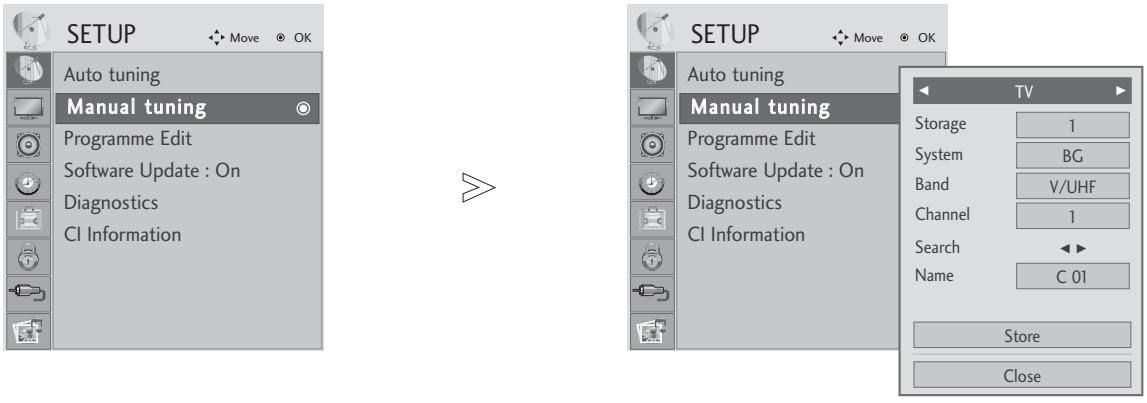
Select the desired channel number.

- Use NUMBER buttons to input a 4-digit password in Lock System 'On'.

- Press the MENU or EXIT button to close the menu window.
- Press the RETURN button to move to the previous menu screen.

MANUAL PROGRAMME TUNING (IN ANALOGUE MODE)

Manual Tuning lets you manually tune and arrange the stations in whatever order you desire.



1 MENU — Select **SETUP**.

2 OK — Select **Manual Tuning**.

3 OK — Select **TV**.

4 or — Select the desired programme number on.

5 Select a TV system.

6 Select **V/UHF** or **Cable**.

7 or — Select the desired channel number.

8 Start searching.

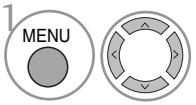
9 OK — Select **Store**.

- Press the MENU or EXIT button to close the menu window.
- Press the RETURN button to move to the previous menu screen.

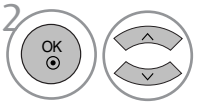
- Use NUMBER buttons to input a 4-digit password in Lock System 'On'.
- L: SECAM L/L' (France)
  BG: PAL B/G, SECAM B/G (Europe / East Europe / Asia / New Zealand / M. East / Africa / Australia)
  I: PAL I/II (U.K. / Ireland / Hong Kong / South Africa)
  DK: PAL D/K, SECAM D/K (East Europe / China / Africa / CIS)
- To store another channel, repeat steps 4 to 9.

■ Assigning a station name

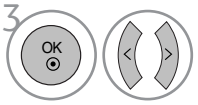
You can assign a station name with five characters to each programme number.

1 

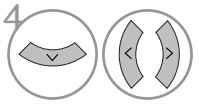
Select SETUP.

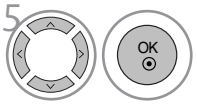
2 

Select Manual Tuning.

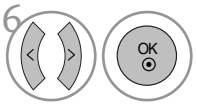
3 

Select TV.

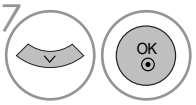
4 
Select Name.

5 

Select the position and make your choice of the second character, and so on.
You can use the alphabet **A** to **Z**, the number **0** to **9**, +/ -, and space.

6 

Select Close.

7 

Select Store.

- Press the MENU or EXIT button to close the menu window.
- Press the RETURN button to move to the previous menu screen.

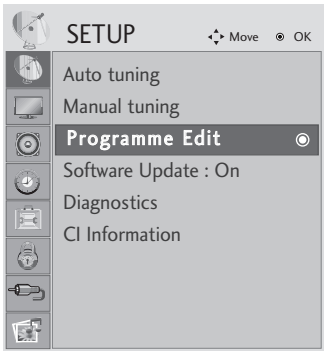
PROGRAMME EDIT

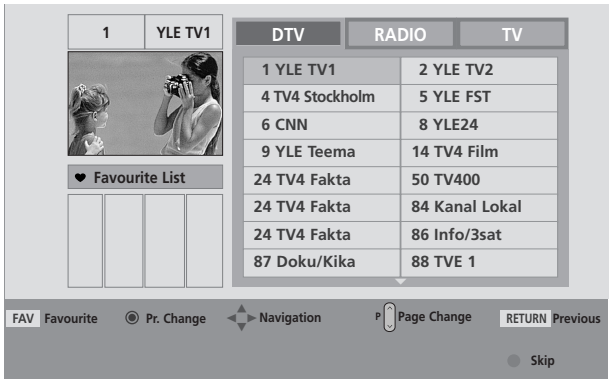
When a programme number is skipped, it means that you will be unable to select it using PR + / - button during TV viewing.

If you wish to select the skipped programme, directly enter the programme number with the NUMBER buttons or select it in the Programme edit menu

This function enables you to skip the stored programmes.

In some countries, it is possible to move a programme number by using the YELLOW button only.





1 MENU Select **SETUP**.

2 OK Select **Programme Edit**.

3 OK Enter the Programme Edit.

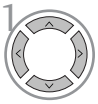
4 Select a programme to be stored or skipped.

- Use NUMBER buttons to input a 4-digit password in Lock System 'On'.

- Press the MENU or EXIT button to close the menu window.
- Press the RETURN button to move to the previous menu screen.

IN DTV/RADIO MODE

■ Skipping a programme number

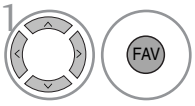
1 
Select a programme number to be skipped.

2 BLUE
Turn the skipped programme number to blue.

3 BLUE
Release the skipped programme.

- When a programme number is skipped, it means that you will be unable to select it using the PR + / - button during normal TV viewing.
- If you wish to select a skipped programme, directly enter the programme number with the NUMBER buttons or select it in the programme edit or EPG.

■ Selecting favourite programme

1 

Select your favourite programme number.

- It will automatically include the selected programme into your favourite programme list.

IN TV MODE

This function enables you to delete or skip the stored programmes.
You can also move some channels to other programme numbers.

■ Auto Sort

1 GREEN Start Auto Sort.

- After activating Auto Sort once, you can no longer edit programmes.

■ Deleting a programme

1 Select a programme number to be deleted.

2 RED Turn the deleted programme number to red.

3 RED Release the deleted programme.

- The selected programme is deleted, all the following programmes are shifted up one

■ Moving a programme

1 Select a programme number to be moved.

2 YELLOW Turn the moved programme number to YELLOW.

3 YELLOW Release the moved programme.

■ Skipping a programme number

1 Select a programme number to be skipped.

2 BLUE Turn the skipped programme number to blue.

3 BLUE Release the skipped programme.

- When a programme number is skipped it means that you will be unable to select it using the PR + / - button during normal TV viewing.
- If you wish to select a skipped programme, directly enter the programme number with the NUMBER buttons or select it in the programme edit or EPG.

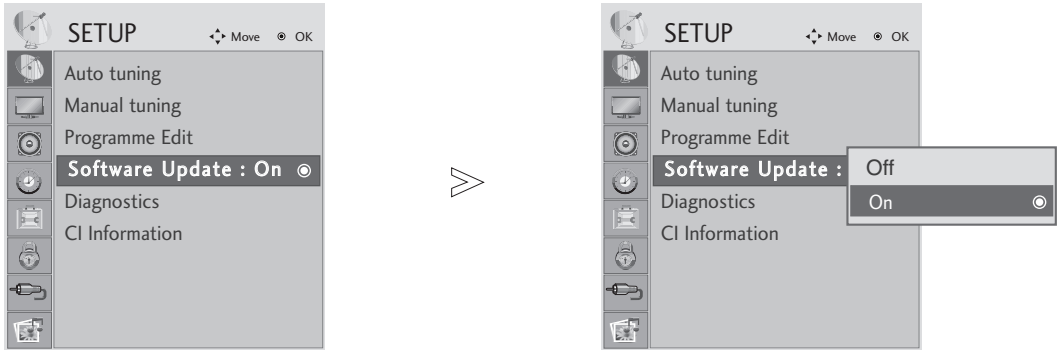
■ Selecting a Favourite Programme

1 FAV Select your favourite programme number.

- The selected programme will be added to the favourite programme list.

SOFTWARE UPDATE

Software Update means software can be downloaded through the digital terrestrial broadcasting system.



1 MENU — Select **SETUP**.

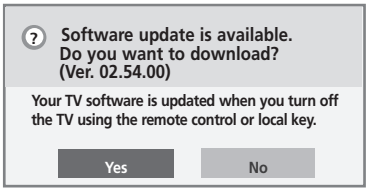
2 OK — Select **Software Update**.

3 OK — Select **On** or **Off**.
- If you select On, a user confirm message box will be displayed to notify that new software is found.

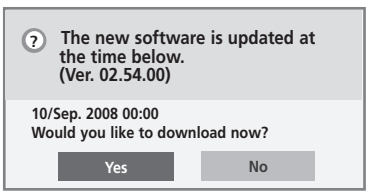
4 OK — Save.

* When setting “Software Update”

Occasionally, a transmission of updated digital software information will result in the following menu on the TV screen.

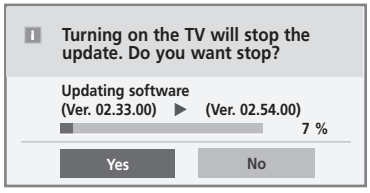


Simple Update :for current update stream



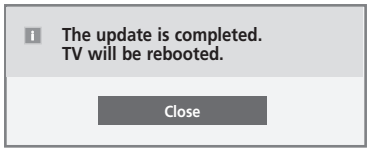
Schedule Update : for scheduled update stream

Select the **YES** using the ◄ ► button and when you see the following picture.



When the power is turned off, downloading starts.
When the power is turned on while updating, the progress status is displayed.

After Software Update is completed, the System takes about one minute to restart.



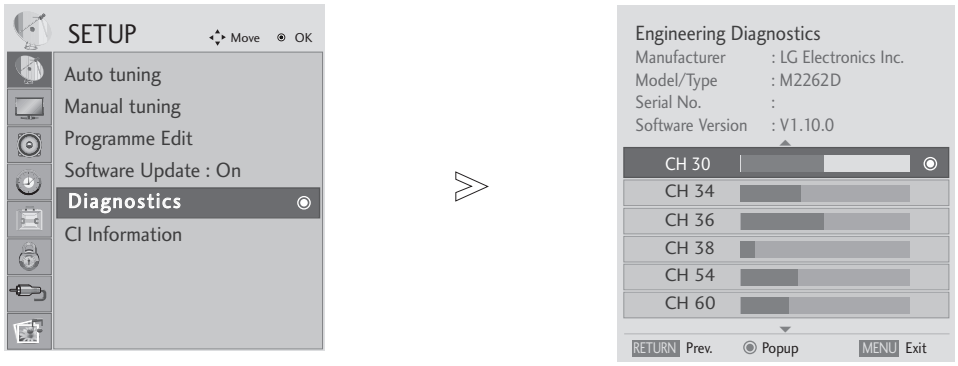
When the Software Update menu is "**Off**", the message to change it to "**On**" appears.

- During Progress of a Software Update, please note the following:
- Power to the set must not be interrupted.
- The set must not be switched off.
- The antenna must not be disconnected.
- After Software Update, you can confirm the updated software version in Diagnostics menu.
- It may take an hour to download the software, so make sure that the power stays on during the download.

DIAGNOSTICS (IN DIGITAL MODE ONLY)

This function enables you to view information on the Manufacturer, Model/Type, Serial Number and Software Version.

This displays the information and signal strength of the tuned MUX.
This displays the signal information and service name of the selected MUX.
(*MUX: A higher directory of channels in digital broadcasting (a single MUX contains multiple channels.))



1 MENU

Select **SETUP**.

2 OK

Select **Diagnostics**.

3 OK

Display Manufacturer, Model/Type, Serial Number and Software Version.

4 OK

Display the Channel information.

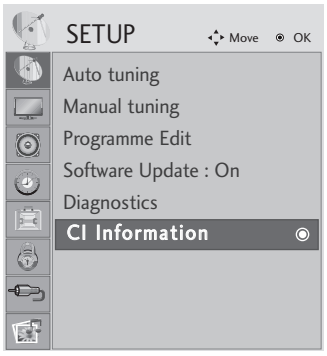
- Press the MENU or EXIT button to close the menu window.
- Press the RETURN button to move to the previous menu screen.

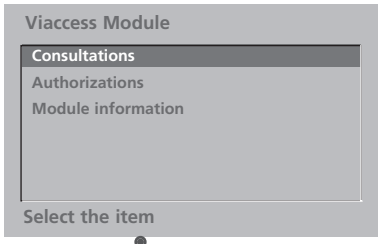
CI [COMMON INTERFACE] INFORMATION

This function enables you to watch some encrypted services (paid services). If you remove the CI Module, you cannot watch paid services.
When the module is inserted into the CI slot, you can access the module menu.
To purchase a module and smart card, contact your dealer. Do not repeatedly insert or remove a CAM module from the set. This may cause a malfunction. When the set is turned on after inserting a CI Module, you may not have any sound output.

This may be incompatible with the CI module and smart card.

CI (Common Interface) functions may not be possible depending upon the country broadcasting circumstances.





- This OSD is only for illustration and the menu options and screen format will vary according to the Digital pay services provider.
- It is possible for you to change CI (Common Interface) menu screen and service by consulting your dealer.

1 MENU — Select **SETUP**.

2 OK — Select **CI Information**.

3 OK — Select the desired item: Module information, smart card information, language, or software download, etc.

4 OK — Save.

- Press the MENU or EXIT button to close the menu window.
- Press the RETURN button to move to the previous menu screen.

SELECTING THE PROGRAMME TABLE

You can check which programmes are stored in the memory by displaying the programme table.

Displayed in the Locked Programme.

■ Displaying programme LIST

1 LIST — Display the PROGRAMME LIST.

- You may find some blue programmes. These have been set up to be skipped by auto programming or in the programme edit mode.
- Some programmes with the channel number shown in the programme LIST indicate there is no station name assigned.

■ Selecting a programme in the programme list

1 — Select a programme.

2 OK — Switch to the chosen programme number.

TV/RADIO — From the programme you are currently watching, the mode will change from TV to DTV to Radio.

■ Paging through a programme list

1 P — Turns the pages.

2 LIST — Returns to normal TV viewing.

■ Displaying the favourite programme table

1 FAV — Display the Favourite Programme table.

EPG (ELECTRONIC PROGRAMME GUIDE) (IN DIGITAL MODE)

This system has an Electronic Programme Guide (EPG) to help navigate through all the possible viewing options.

The EPG supplies information such as programme listings, start and end times for all available services. In addition, detailed information about the programme is often available in the EPG (the availability and amount of these programme details will vary, depending on the particular broadcaster).

This function can be used only when the EPG information is broadcasted by broadcasting companies.

The EPG displays the programme description for the next eight days.

INFO ⓘ Shows the present screen information.

- Displayed with a DTV Programme.
- Displayed with a Radio Programme.
- MHEG Displayed with a MHEG Programme.
- AAC Displayed with a AAC Programme.
- 4:3 Aspect ratio of broadcasting programme.
- 16:9 Aspect ratio of broadcasting programme.
- Displayed with a Teletext Programme.
- Displayed with a Subtitle Programme.
- Displayed with a Scramble Programme.
- Displayed with a Dolby Programme.
- Displayed with a Dolby Digital PLUS Programme.

480i/p, 576i/p, 720p, 1080i/p : Resolution of broadcasting programme

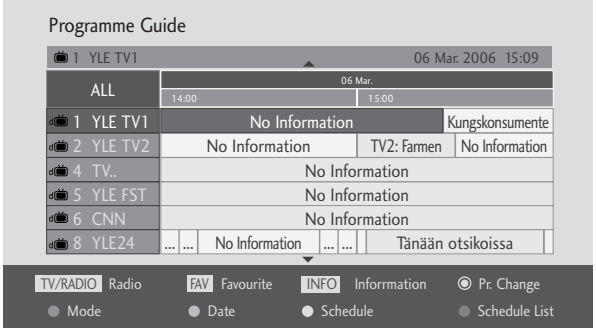
Switch on/off EPG

1 GUIDE Switch on or off EPG.

Select a programme

1 or PR Select desired programme.

2 OK Display the selected programme.



EPG (ELECTRONIC PROGRAMME GUIDE) (IN DIGITAL MODE)

Button Function in NOW/NEXT Guide Mode

RED — Change EPG mode.

YELLOW — Enter Timer Record/Remind setting mode.

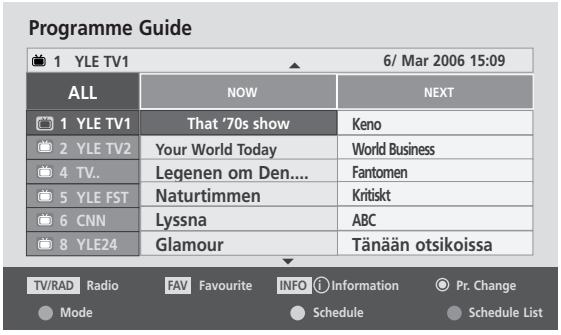
BLUE — Enter Timer Record/Remind list mode.

OK — Change to the selected programme.

Select NOW or NEXT Programme.

Select the Broadcast Programme.

PR — Page Up/Down.



GUIDE or EXIT — Switch off EPG.

TV/RADIO — Select TV or RADIO Programme.

INFO — The detail information on or off.

Button Function in 8 Day Guide Mode

RED — Change EPG mode.

GREEN — Enter Date setting mode.

YELLOW — Enter Timer Record/Remind setting mode.

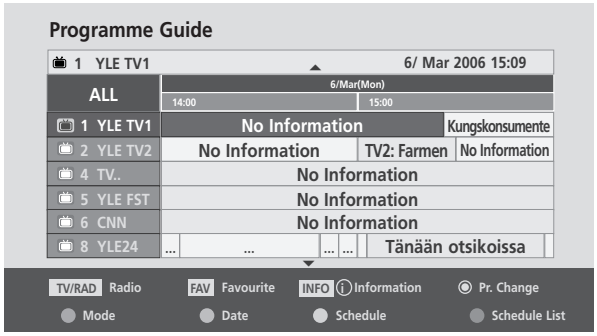
BLUE — Enter Timer Record/Remind list mode.

OK — Change to the selected programme.

Select NOW or NEXT Programme.

Select the Broadcast Programme.

PR — Page Up/Down.



GUIDE or EXIT — Switch off EPG.

TV/RADIO — Select TV or RADIO Programme.

INFO — The detailed information on or off.

EPG (ELECTRONIC PROGRAMME GUIDE) (IN DIGITAL MODE)

Button Function in Date Change Mode

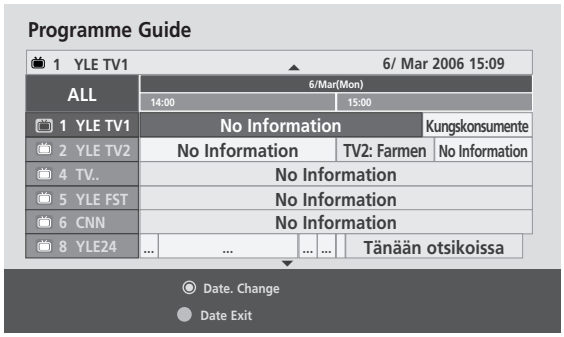
GREEN Switch off Date setting mode.

OK Change to the selected date.

Select a date.

Switch off Date setting mode.

GUIDE or EXIT Switch off EPG.



Button Function in Extended Description Box

Text Up/Down.

YELLOW Enter Timer Record/Remind setting mode.

INFO The detailed information on or off.

GUIDE or EXIT Switch off EPG.

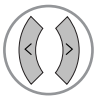
EPG (ELECTRONIC PROGRAMME GUIDE) (IN DIGITAL MODE)

Button Function in Record/Remind Setting Mode

- This function is available only when recording equipment that uses 8 pin recording signalling has been connected to the DTV-OUT terminal, using a SCART cable.

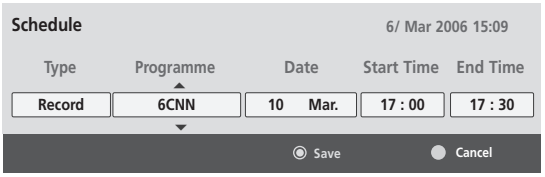
YELLOW — Change to Guide or Timer list mode.

OK — Save Timer Record/Remind.



Select Type, Programme, Date or Start/End time.

Function setting.



Button Function in Schedule List Mode

YELLOW — Add new Manual Timer setting mode.

GREEN — Enter Schedule list editing mode.

RED — Delete the selected item.

BLUE — Change to Guide mode.

Select Schedule list.

PICTURE CONTROL

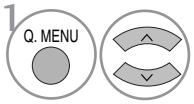
PICTURE SIZE (ASPECT RATIO) CONTROL

16:9, Just Scan, Original, 4:3, 14:9, Zoom, Cinema Zoom and Full Wide.

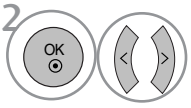
If a fixed image is displayed on the screen for a long time, that fixed image may become imprinted on the screen and remain visible.

You can adjust the enlarge proportion using ▲ ▼ button.

This function works in the following signal.



Select **Aspect Ratio**.



Select the desired picture format.

- You can also adjust **Aspect Ratio** in the **PICTURE** menu.
- For Zoom Setting, select **14:9**, **Zoom and Cinema Zoom** in Ratio Menu. After completing Zoom Setting, the display goes back to Q.Menu.

- **16:9**

  The following selection will allow you to adjust the picture horizontally, in linear proportion, to fill the entire screen (useful for viewing 4:3 formatted DVDs).

- **4:3**

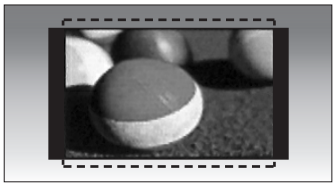
  The following selection will allow you to view a picture with an original 4:3 aspect ratio, grey bars will appear on both the left and right of the screen.

• **Original**

When your TV receives a wide screen signal, it will automatically change to the picture format broadcast.

• **14:9**

You can view a picture format of 14:9 or a general TV programme in the 14:9 mode. The 14:9 screen is viewed in the same way as in 4:3, but is magnified to the left and right.



• **Zoom**

The following selection will allow you to view the picture without any alteration, while filling the entire screen. However, the top and bottom of the picture will be cropped.

• **Cinema Zoom**

Choose Cinema Zoom when you wish the picture to be altered, both horizontally extended and vertically cropped. The picture adopting a compromise between alteration and screen coverage.

• **Just Scan**

The following Selection allows you to view the picture in the best quality without loss of original picture in high resolution image.

Note: If there is interference in original picture, you can view interference at the edge.

• **Full Wide**

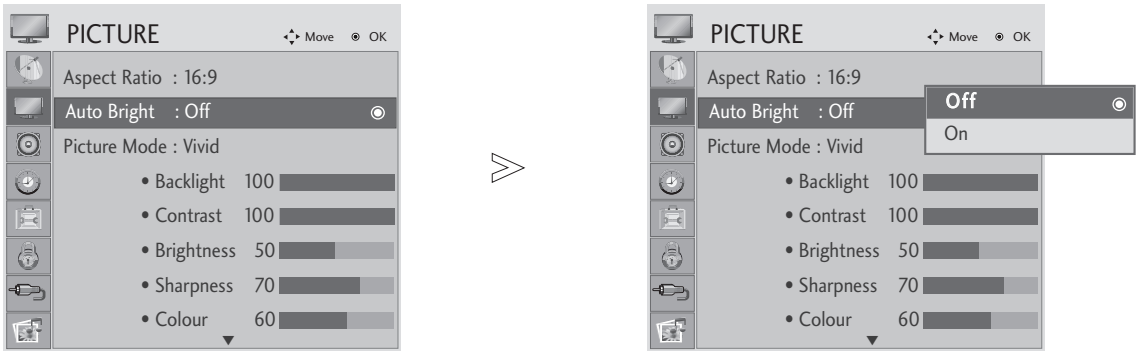
When TV receives the wide screen signal,it will lead you to adjust the picture horizontally or vertically, in a linear proportion,to fill the entire screen fully.

NOTE

- ► You can only select 16:9 (Wide), 4:3, 14:9, Zoom, Cinema Zoom in Component (under 720p), HDMI mode.
- ► You can only select 4:3, 16:9 (Wide) in RGB/DVI mode only.
- ► In DTV/HDMI/Component (over 720p) mode, Just Scan is available.

AUTO BRIGHT

When ON is selected, this function adjusts the screen brightness automatically, depending on the surrounding environment, to provide optimal viewing conditions.
When OFF is selected, this function is turned off.



1 MENU

Select **PICTURE**.

2 OK

Select **Auto Bright.**

3 OK

Select **On** or **Off**.

- Press the MENU or EXIT button to close the menu window.
- Press the RETURN button to move to the previous menu screen.

TO USE A USB DEVICE

■ If you don't press any button for a while during the playing, the play information box (as shown in the below) will float as a screen saver.

■ The 'Screen Saver'?

Screen saver is to prevent screen pixel damage due to an fixed image remaining on the screen for a extended period of time.

NOTE

- ▶ When music is playing, ♪ is displayed in back of the music title.
- ▶ A damaged or corrupted music does not play but displays 00:00 in playtime.
- ▶ A music downloaded from a paid service with copyright protection does not start but displays inappropriate information in playtime.
- ▶ If you press **OK**, ■ buttons, screen saver is stopped.
- ▶ The **PLAY(►)**, **Pause(II)**, ■, ►►, ◄◄ buttons on the remote control are also available in this mode.
- ▶ You can use the ►► button to select the next music and the ◄◄ button to select the previous music.

Using the remote control

◄◄ / ►►	When playing, repeatedly, press the **REW(◄◄)** button to speed up ◄◄ -> ◄◄◄ -> ◄◄◄◄ -> ◄◄◄◄◄ ->◄◄◄◄◄◄ . repeatedly, press the **FF(►►)** button to speed up ►►-> ►►► -> ►►►► -> ►►►►► -> ►►►►►►. ■ Pressing these buttons repeatedly increases the fast forward/reverse speed.
II	During playback, press the **Pause(II)** button. ■ Still screen is displayed.
< >	■ When using the < or > button during playback a cursor indicating the position can be viewed on the screen.
PLAY(►)	Press the **PLAY(►)** button to return to normal playback.

TELETEXT

This feature is not available in all countries.

Teletext is a free service broadcast by most TV stations which gives up-to-the-minute information on news, weather, television programmes, share prices and many other topics.

The teletext decoder of this set can support the SIMPLE, TOP and FASTEXT systems. SIMPLE (standard teletext) consists of a number of pages which are selected by directly entering the corresponding page number. TOP and FASTEXT are more modern methods allowing quick and easy selection of teletext information.

SWITCH ON/OFF

Press the **TEXT** button to switch to teletext. The initial page or last page appears on the screen.

Two page numbers, TV station name, date and time are displayed on the screen headline. The first page number indicates your selection, while the second shows the current page displayed.

Press the **TEXT** or **EXIT** button to switch off teletext. The previous mode reappears.

SIMPLE TEXT

■ Page selection

1. Enter the desired page number as a three-digit number with the NUMBER buttons. If during selection you press a wrong number, you must complete the three-digit number and then re-enter the correct page number.
2. The PR+ or - button can be used to select the previous or next page.

TOP TEXT

The user guide displays four fields--red, green, yellow and blue at the bottom of the screen. The yellow field denotes the next group and the blue field indicates the next block.

■ Block / group / page selection

1. With the blue button you can progress from block to block.
2. Use the yellow button to proceed to the next group with automatic overflow to the next block.
3. With the green button you can proceed to the next existing page with automatic overflow to the next group. Alternatively, the PR + button can be used.
4. The red button permits you to return to previous selection. Alternatively, the PR - button can be used.

■ Direct page selection

Corresponding to the SIMPLE teletext mode, you can select a page by entering it as a three-digit number using the NUMBER buttons in TOP mode.

FASTEXT

The teletext pages are colour coded along the bottom of the screen and are selected by pressing the corresponding coloured button.

■ Page selection

❶ Press the **T.OPT** button and then use ▲ ▼ button to select menu. Display the index page.
❷ You can select the pages which are colour coded along the bottom line with corresponding coloured buttons.
❸ AS with SIMPLE teletext mode, you can select a page by entering its three digit page number with the NUMBER buttons in FASTEXT mode.
❹ The **P** + - button can be used to select the preceding or following page.

SPECIAL TELETEXT FUNCTIONS

■ Press the **T. OPT** button and then use ▲ ▼ button to select the **Text Option** menu.

■ **Index**
Select the each index page.

■ **Time**
When viewing a TV programme, select this menu to display the time at the top right hand corner of the screen.
In the teletext mode, press this button to select a sub page number. The sub page number is displayed at the bottom of the screen. To hold or change the sub page, press the RED/GREEN, ◄ ► or NUMBER buttons.

■ **Hold**
Stops the automatic page change which will occur if a teletext page consists of 2 or more sub pages. The number of sub pages and the sub page displayed is, usually, shown on the screen below the time. When this menu is selected the stop symbol is displayed at the top left-hand corner of the screen and the automatic page change is inactive.

■ **Reveal**
Select this menu to display concealed information, such as solutions to riddles or puzzles.

■ **Update**
Displays the TV picture on the screen while waiting for a new teletext page. The display will appear at the top left hand corner of the screen. When the updated page is available then display will change to the page number. Select this menu again to view the updated teletext page.

DIGITAL TELETEXT

*This function works in UK/Ireland only.

The set gives you access to a digital teletext which is greatly improved in various aspects such as text, graphics and so on.
This digital teletext can be accessed by special digital teletext services and specific services which broadcast digital teletext.
You should select off from the subtitle language to display teletext by pressing SUBTITLE button.

TELETEXT WITHIN DIGITAL SERVICE

1. Press the numeric or PR + or - button to select a digital service which broadcasts digital teletext.
   To know which are digital teletext services, refer to the EPG service list.
2. Follow the indications on digital teletext and move onto the next step by pressing TEXT, OK, ▲ or ▼, ◄ or ►, RED, GREEN, YELLOW, BLUE or NUMBER buttons and so on.
3. To change digital teletext service, just select a different service by the numeric or PR + or - button.

   If pressing the MENU, GUIDE or INFO ⓘbutton, the teletext service disappear temporarily. When pressing these buttons again, the teletext service is appeared.

TELETEXT IN DIGITAL SERVICE

1. Press the numeric or PR + or - button to select a certain service which broadcasts digital teletext.
2. Press the TEXT or colour button to switch on teletext.
3. Follow the indications on digital teletext and move onto the next step by pressing OK, ▲ or ▼, ◄ or ►, RED, GREEN, YELLOW, BLUE or NUMBER buttons and so on.
4. Press the TEXT or colour button to switch off digital teletext and return to TV viewing.

   Some services may allow you to access text services by pressing the RED button.

   If pressing the MENU, GUIDE or INFO ⓘbutton, the teletext service disappears temporarily. When pressing these buttons again, the teletext service is appears.

APPENDIX

TROUBLESHOOTING

The operation does not work normally.	
The remote control doesn't work	■ Check to see if there is any object between the product and the remote control causing obstruction. Ensure you are pointing the remote control directly at the set. ■ Ensure that the batteries are installed with correct polarity (+ to +, - to -). ■ Ensure that the correct remote operating mode is set: TV, VCR, etc. ■ Install new batteries.
Power is suddenly turned off	■ Is the sleep timer set? ■ Check the power control settings. Power interrupted. ■ No broadcast on station tuned with **Auto sleep** activated.

The video function does not work.	
No picture &No sound	■ Check whether the product is turned on. ■ Try another channel. The problem may be with the broadcast. ■ Is the power cord inserted into wall power outlet? ■ Check your antenna direction and/or location. ■ Test the wall power outlet, plug another product's power cord into the outlet where the product's power cord was plugged in.
Picture appears slowly after switching on	■ This is normal, the image is muted during the product startup process. Please contact your service centre, if the picture has not appeared after five minutes.
No color, poor colour, or poor picture	■ Adjust Colour in menu option. ■ Keep a sufficient distance between the product and the VCR. ■ Try another channel. The problem may be with the broadcast. ■ Are the video cables installed properly? ■ Activate any function to restore the brightness of the picture.
Horizontal/vertical bars or picture shaking	■ Check for local interference such as an electrical appliance or power tool.
Poor reception on some channels	■ Station or cable product experiencing problems, tune to another station. ■ Station signal is weak, reorient antenna to receive weaker station. ■ Check for sources of possible interference.
Lines or streaks in pictures	■ Check antenna (Change the direction of the antenna).

The audio function does not work.	
Picture OK & No sound	■ Press the VOL + or - button. ■ Sound muted? Press MUTE button. ■ Try another channel. The problem may be with the broadcast. ■ Are the audio cables installed properly?
No output from one of the speakers	■ Adjust **Balance** in menu option.
Unusual sound from inside the product	■ A change in ambient humidity or temperature may result in an unusual noise when the product is turned on or off and does not indicate a problem with the product.

Only RGB/DVI mode applied

No image is displayed.	
Power is on, power indicator is blue but the screen appears extremely dark.	■ Adjust brightness and contrast again.
Does the power indicator look blinking amber?	■ If the product is in power saving mode, move the mouse or press any key.
Does the 'Out of range' message appear?	■ The signal from the PC (Video card) is out of the vertical or horizontal frequency range of the product. Adjust the frequency range by referring to the Specifications in this user's guide.
Does the 'Check signal cable' message appear?	■ The signal cable between PC and product is not connected. Check the signal cable. ■ Press the 'INPUT' button in the remote control to check the input signal.

'Unknown Product' message appears when the product is connected.	
Did you install the driver?	■ Install the product driver, which is provided with the product, or download it from the web site. (http://www.lge.com) ■ See if the plug_&_play function is supported by referring to the video card user's guide.

After-image appears on the product.	
After-image appears when the product is turned off.	■ If you use a fixed image for a long time, the pixels may be damaged quickly. Use the screen saver function.

Screen color is abnormal.	
Screen has poor color resoluion (16_colors).	■ Set screen color resolution to more than 24 bits (true color) Select control Panel-Display-Settings-Color Table menu in Windows.
Screen color is unstable or mono color.	■ Check the connection status of the signal cable.
Do back spots appear on the screen?	■ Several pixels (red, green, white or black color) may appear on the screen, which can be attributable to the unique characteristics of the LCD panel. It is not a malfunction of the LCD.

Only RGB mode applied

The screen image looks abnormal.	
Is the screen position wrong?	■ Adjust the Position menu in OSD. ■ See if the video card resolution and frequency are supported by the product. If the frequency is out of range, set to the recommended resolution in the Control Panel-Display-Setting menu.
Do thin lines appear on the background screen?	■ Adjust the Clock menu in OSD.
Horizontal noise appears or the characters look blurred.	■ Adjust the Phase menu in OSD.

MAINTENANCE

Early malfunctions can be prevented. Careful and regular cleaning can extend the amount of time you can enjoy your new set.

Caution: Be sure to turn the power off and unplug the power cord before you begin any cleaning.

Cleaning the Screen

1. To keep the dust off your screen for a while, wet a soft cloth in a mixture of lukewarm water and a little fabric softener or dishwashing detergent. Wring the cloth until it's almost dry, and then use it to wipe the screen.
2. Make sure the excess water is off the screen, and then let it air-dry before you turn on your set.

Cleaning the Cabinet

- To remove dirt or dust, wipe the cabinet with a soft, dry, lint-free cloth.
- Please be sure not to use a wet cloth.

Extended Absence

⚠ CAUTION

► If you expect to leave your set dormant for a long time (such as a vacation), it's a good idea to unplug the power cord to protect against possible damage from lightning or power surges.

PRODUCT SPECIFICATIONS

<M1962D>

LCD Panel	Screen Type	470.1mm Wide (18.51 inch) TFT (Thin Film Transistor) LCD (Liquid Crystal Display) Panel Visible diagonal size: 470.1mm
	Pixel Pitch	0.30(H) mm x 0.30(V) mm
Video Signal	Max. Resolution	1360 X 768 @ 60 Hz
	Recommended Resolution	1360 X 768 @ 60 Hz
	Horizontal Frequency	30 kHz to 61 kHz
	Vertical Frequency	56 Hz to 75 Hz
	Synchronization Type	Separate Sync, Digital
Input Connector		TV, D-Sub Analog, SCART*2, PC Audio In, component, DVI-D, HDMI*2, CVBS
Power	Rated Voltage	AC 100-240 V~ 50 / 60 Hz 0.6 A
	Power Consumption	On Mode : 35 W (typ.) Sleep Mode ≤ 1 W Off Mode ≤ 0.5 W
Tilt	Tilt Range	-5˚ to 15˚
Dimensions (Width x Height x Depth) Weight		449.7 mm x 368.8 mm x 221.6 mm (17.70 inch x 14.52 inch x 8.72 inch) 3.88 kg (8.55 lb)
Environmental conditions	Operating Temperature Operating Humidity	10 ˚C to 35 ˚C 20 % to 80 %
	Storage Temperature Storage Humidity	-10 ˚C to 60 ˚C 5 % to 90 %

■ The specifications shown above may be changed without prior notice for quality improvement.

PRODUCT SPECIFICATIONS

<M2062D>

LCD Panel	Screen Type	508.5 mm Wide (20.0 inch) TFT (Thin Film Transistor) LCD (Liquid Crystal Display) Panel Visible diagonal size : 508.5 mm
	Pixel Pitch	0.2766 (H) mm x 0.2766 (V) mm
Video Signal	Max. Resolution	1600 X 900 @60 Hz
	Recommended Resolution	1600 X 900 @60 Hz
	Horizontal Frequency	30 kHz to 83 kHz
	Vertical Frequency	56 Hz to 75 Hz
	Synchronization Type	Separate Sync, Digital
Input Connector		TV, D-Sub Analog, SCART*2, PC Audio In, component, DVI-D, HDMI*2, CVBS
Power	Rated Voltage	AC 100-240 V~ 50 / 60 Hz 0.9 A
	Power Consumption	On Mode : 50 W (typ.) Sleep Mode ≤1 W Off Mode ≤ 0.5 W
Tilt	Tilt Range	-5˚ to 15˚
Dimensions (Width x Height x Depth) Weight		482.3 mm x 384.2 mm x 221.6 mm (18.99 inch x 15.13 inch x 8.72 inch) 4.8 kg (10.58 lb)
Environmental conditions	Operating Temperature Operating Humidity Storage Temperature Storage Humidity	10 ˚C to 35 ˚C 20 % to 80 % -10 ˚C to 60 ˚C 5 % to 90 %

■ The specifications shown above may be changed without prior notice for quality improvement.

PRODUCT SPECIFICATIONS

<M2262D>

LCD Panel	Screen Type	546.86 mm Wide (21.53 inch) TFT (Thin Film Transistor) LCD (Liquid Crystal Display) Panel Visible diagonal size: 546.86 mm
	Pixel Pitch	0.248(H) mm x 0.248(V) mm
Video Signal	Max. Resolution	1920 X 1080 @ 60 Hz
	Recommended Resolution	1920 X 1080 @ 60 Hz
	Horizontal Frequency	30 kHz to 83 kHz
	Vertical Frequency	56 kHz to 75 Hz
	Synchronization Type	Separate Sync, Digital
Input Connector		TV, D-Sub Analog, SCART*2, PC Audio In, component, DVI-D, HDMI*2, CVBS
Power	Rated Voltage	AC 100-240 V~ 50 / 60 Hz 0.9 A
	Power Consumption	On Mode : 53 W (typ.) Sleep Mode ≤ 1 W Off Mode ≤ 0.5 W
Tilt	Tilt Range	-5˚ to 15˚
Dimensions (Width x Height x Depth) Weight		517.2 mm x 399.8 mm x 221.6 mm (20.36 inch x 15.74 inch x 8.72 inch) 4.7 kg (10.4 lb)
Environmental conditions	Operating Temperature	10 ˚C to 35 ˚C
	Operating Humidity	20 % to 80 %
	Storage Temperature	-10 ˚C to 60 ˚C
	Storage Humidity	5 % to 90 %

■ The specifications shown above may be changed without prior notice for quality improvement.

PRODUCT SPECIFICATIONS

<M2362D>

LCD Panel	Screen Type	584.2 mm Wide (23 inch) TFT (Thin Film Transistor) LCD (Liquid Crystal Display) Panel Visible diagonal size : 584.2 mm
	Pixel Pitch	0.265(H) mm x 0.265(V) mm
Video Signal	Max. Resolution	1920 X 1080 @60 Hz
	Recommended Resolution	1920 X 1080 @60 Hz
	Horizontal Frequency	30 kHz to 83 kHz
	Vertical Frequency	56 Hz to 75 Hz
	Synchronization Type	Separate Sync, Digital
Input Connector		TV, D-Sub Analog, SCART*2, PC Audio In, component, DVI-D, HDMI*2, CVBS
Power	Rated Voltage	AC 100-240 V~ 50 / 60 Hz 1.0 A
	Power Consumption	On Mode : 55 W (typ.) Sleep Mode ≤ 1 W Off Mode ≤ 0.5 W
Tilt	Tilt Range	-5˚ to 15˚
Dimensions (Width x Height x Depth) Weight		551.8 mm x 419.5 mm x 221.6 mm (21.72 inch x 16.52 inch x 8.72 inch) 5.2 kg (11.46 lb)
Environmental conditions	Operating Temperature Operating Humidity	10 ˚C to 35 ˚C 20 % to 80 %
	Storage Temperature Storage Humidity	-10 ˚C to 60 ˚C 5 % to 90 %

■ The specifications shown above may be changed without prior notice for quality improvement.

APPENDIX

PRODUCT SPECIFICATIONS

<M2762D>

LCD Panel	Screen Type	686 mm Wide (27 inch) TFT (Thin Film Transistor) LCD (Liquid Crystal Display) Panel Visible diagonal size: 686 mm
	Pixel Pitch	0.3114(H) mm x 0.3114(V) mm
Video Signal	Max. Resolution	1920 X 1080 @60 Hz
	Recommended Resolution	1920 X 1080 @60 Hz
	Horizontal Frequency	30 kHz to 83 kHz
	Vertical Frequency	56 Hz to 75 Hz
	Synchronization Type	Separate Sync, Digital
Input Connector		TV, D-Sub Analog, SCART*2, PC Audio In, component, DVI-D, HDMI*2, CVBS
Power	Rated Voltage	AC 100-240 V~ 50 / 60 Hz 1.2 A
	Power Consumption	On Mode : 63 W (typ.) Sleep Mode ≤ 1 W Off Mode ≤ 0.5 W
Tilt	Tilt Range	-5˚ to 15˚
Swivel	Swivel Range	358˚
Dimensions (Width x Height x Depth) Weight		649.1 mm x 485 mm x 210 mm (25.56 inch x 19.09 inch x 8.27 inch) 7.2 kg (15.87 lb)
Environmental conditions	Operating Temperature Operating Humidity	10 ˚C to 35 ˚C 20 % to 80 %
	Storage Temperature Storage Humidity	-10 ˚C to 60 ˚C 5 % to 90 %

■ The specifications shown above may be changed without prior notice for quality improvement.

APPENDIX

PROGRAMMING THE REMOTE CONTROL

The remote is a multi-brand or universal remote. It can be programmed to operate most remote-controllable devices of other manufacturers.
Note that the remote may not control all models of other brands.

Programming a code into a remote mode

1. Test your remote control.
   To find out whether your remote control can operate the component without programming, turn on the component such as a VCR and press the corresponding mode button (such as a **DVD** or **VCR**) on the remote control, while pointing at the component. Test the **POWER** and **PR + / -** buttons to see if the component responds properly. If not, the remote requires programming to operate the device.

2. Turn on the component to be programmed, then press the corresponding mode button (such as a **DVD** or **VCR**) on the remote control. The remote control button of desired device is lighted.

3. Press the **MENU** and **MUTE** buttons simultaneously, the remote control is ready to be programmed for the code.

4. Enter a code number using the number buttons on the remote control. Programming code numbers for the corresponding component can be found on the following pages. Again, if the code is correct, the device will turn off.

5. Press the **MENU** button to store the code.

6. Test the remote control functions to see if the component responds properly. If not, repeat from step 2.

PROGRAMMING CODE

DVD

Brand	Codes	Brand	Codes	Brand	Codes
APEX DIGITAL	022	MITSUBISHI	002	RCA	005 006
DENON	020 014	NAD	023	SAMSUNG	011 015
GE	005 006	ONKYO	008 017	SONY	007
HARMAN KARDON	027	PANASONIC	003 009	THOMPSON	005 006
JVC	012	PHILIPS	013	TOSHIBA	019 008
LG	001 010 016 025	PIONEER	004 026	YAMAHA	009 018
MAGNAVOX	013	PROCEED	021	ZENITH	010 016 025
MARANTZ	024	PROSCAN	005 006		

APPENDIX

VCR

Brand	Codes
AIWA	034
AKAI	016 043 046 124 125 146
AMPRO	072
ANAM	031 033 103
AUDIO DYNAMICS	012 023 039 043
BROKSONIC	035 037 129
CANON	028 031 033
CAPEHART	108
CRAIG	003 040 135
CURTIS MATHES	031 033 041
DAEWOO	005 007 010 064 065 108 110 111 112 116 117 119
DAYTRON	108
DBX	012 023 039 043
DYNATECH	034 053
ELECTROHOME	059
EMERSON	006 017 025 027 029 031 034 035 036 037 046 101 129 131 138 153
FISHER	003 008 009 010
FUNAI	034
GE	031 033 063 072 107 109 144 147
GO VIDEO	132 136
HARMAN KARDON	012 045
HITACHI	004 018 026 034 043 063 137 150
INSTANTREPLAY	031 033
JCL	031 033
JCPENNY	012 013 015 033 040 066 101
JENSEN	043
JVC	012 031 033 043 048 050 055 060 130 150 152
KENWOOD	014 034 039 043 047 048
LG (GOLDSTAR)	001 012 013 020 101 106 114 123
LLOYD	034
LXI	003 009 013 014 017 034 101 106
MAGIN	040
MAGNAVOX	031 033 034 041 067 068
MARANTZ	012 031 033 067 069
MARTA	101
MATSUI	027 030
MEI	031 033
MEMOREX	003 010 014 031 033 034 053 072 101 102 134 139
MGA	045 046 059
MINOLTA	013 020
MITSUBISHI	013 020 045 046 049 051 059 061 151
MTC	034 040
MULTITECH	024 034
NEC	012 023 039 043 048
NORDMENDE	043
OPTONICA	053 054
PANASONIC	066 070 074 083 133 140 145
PENTAX	013 020 031 033 063
PHILCO	031 034 067
PHILIPS	031 033 034 054 067 071 101
PILOT	101
PIONEER	013 021 048
PORTLAND	108
PULSAR	072
QUARTZ	011 014
QUASAR	033 066 075 145
RCA	013 020 033 034 040 041 062 063 107 109 140 144 145 147
REALISTIC	003 008 010 014 031 033 034 040 053 054 101
RICO	058
RUNCO	148
SALORA	014
SAMSUNG	032 040 102 104 105 107 109 112 113 115 120 122 125
SANSUI	022 043 048 135
SANYO	003 007 010 014 102 134
SCOTT	017 037 112 129 131
SEARS	003 008 009 010 013 014 017 020 031 042 073 081 101
SHARP	031 054 149
SHINTOM	024
SONY	003 009 031 052 056 057 058 076 077 078 149
SOUNDESIGN	034
STS	013
SYLVANIA	031 033 034 059 067
SYMPHONIC	034
TANDY	010 034
TATUNG	039 043
TEAC	034 039 043
TECHNICS	031 033 070
TEKNIKA	019 031 033 034 101
THOMAS	034
TMK	006
TOSHIBA	008 013 042 047 059 082 112 131
TOTEVISION	040 101
UNITECH	040
VECTOR RESEARCH	012
VICTOR	048
VIDEO CONCEPTS	012 034 046
VIDEOSONIC	040
WARDS	003 013 017 024 031 033 034 040 053 054 131
YAMAHA	012 034 039 043
ZENITH	034 048 056 058 072 080 101

APPENDIX
IR CODES

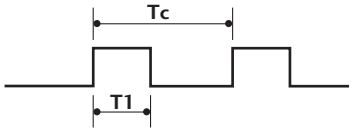
1. How to Connect

■ Connect your wired remote control to the Remote Control port on the set.

2. Remote Control IR Codes

■ Output waveform

Single pulse, modulated with 37.917 kHz signal at 455 kHz



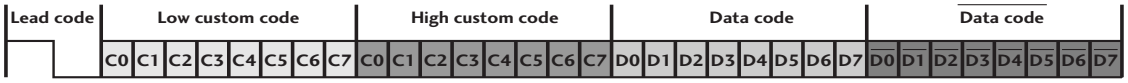
Carrier frequency

FCAR = 1/TC = fOSC/12

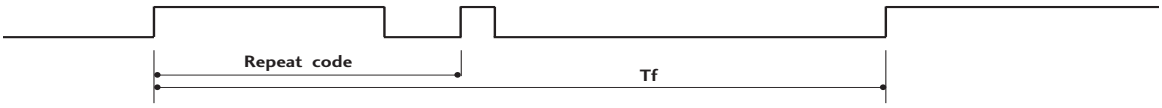
Duty ratio = T1/TC = 1/3

■ Configuration of frame

1st frame

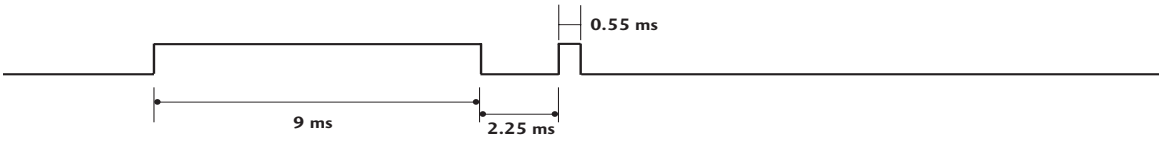


Repeat frame



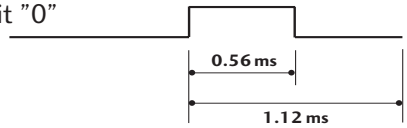
■ Lead code

■ Repeat code

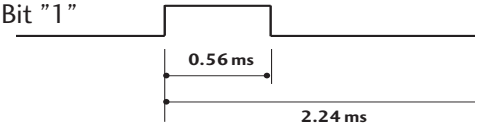


■ **Bit description**

Bit "0"

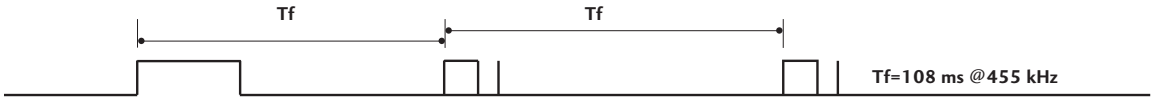


Bit "1"



■ **Frame interval: Tf**

The waveform is transmitted as long as a key is depressed.



APPENDIX

Code (Hexa)	Function	Note
00	PR +	R/C BUTTON
01	PR -	R/C BUTTON
02	VOL +	R/C BUTTON
03	VOL -	R/C BUTTON
40	Up (▲)	R/C BUTTON
41	Down (▼)	R/C BUTTON
06	Right (►)	R/C BUTTON
07	Left (◄)	R/C BUTTON
08	POWER	R/C BUTTON (POWER ON/OFF)
09	MUTE	R/C BUTTON
0B	INPUT	R/C BUTTON
10	Number Key 0	R/C BUTTON
11	Number Key 1	R/C BUTTON
12	Number Key 2	R/C BUTTON
13	Number Key 3	R/C BUTTON
14	Number Key 4	R/C BUTTON
15	Number Key 5	R/C BUTTON
16	Number Key 6	R/C BUTTON
17	Number Key 7	R/C BUTTON
18	Number Key 8	R/C BUTTON
19	Number Key 9	R/C BUTTON
1A	Q.VIEW	R/C BUTTON
1E	FAV	R/C BUTTON
20	TEXT	R/C BUTTON
21	T.OPT	R/C BUTTON
28	RETURN	R/C BUTTON
39	SUBTITLE	R/C BUTTON
43	MENU	R/C BUTTON
44	OK(⦿)	R/C BUTTON
45	Q.MENU	R/C BUTTON
50	TV/PC	R/C BUTTON
F0	TV/RADIO	R/C BUTTON
0A	I/II	R/C BUTTON
5B	EXIT	R/C BUTTON
1E	MARK	R/C BUTTON
53	LIST	R/C BUTTON
61	BLUE Key	R/C BUTTON
63	YELLOW Key	R/C BUTTON
71	GREEN Key	R/C BUTTON
72	RED Key	R/C BUTTON
AA	INFO ⓘ	R/C BUTTON
AB	GUIDE	R/C BUTTON

APPENDIX

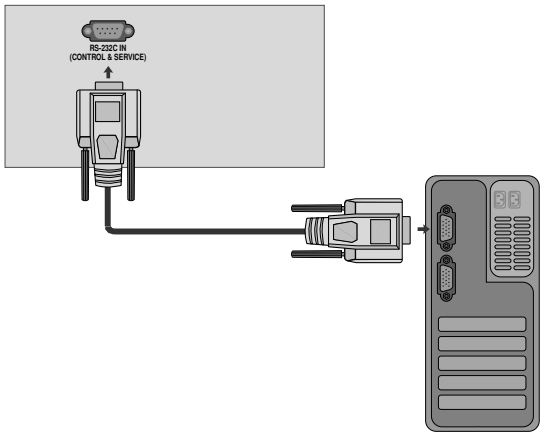
EXTERNAL CONTROL DEVICE SETUP

RS-232C Setup

Connect the RS-232C (serial port) input jack to an external control device (such as a computer or an A/V control system) to control the product's functions externally.

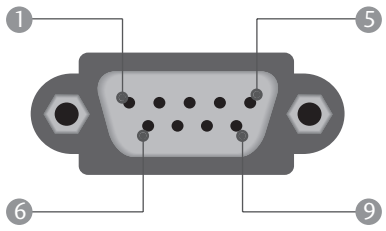
Connect the serial port of the control device to the RS-232C jack on the product back panel.

Note: RS-232C connection cables are not supplied with the product.



Type of Connector; D-Sub 9-Pin Male

No.	Pin Name
1	No connection
2	RXD (Receive data)
3	TXD (Transmit data)
4	DTR (DTE side ready)
5	GND
6	DSR (DCE side ready)
7	RTS (Ready to send)
8	CTS (Clear to send)
9	No Connection



RS-232C Configurations

7-Wire Configurations (Standard RS-232C cable)

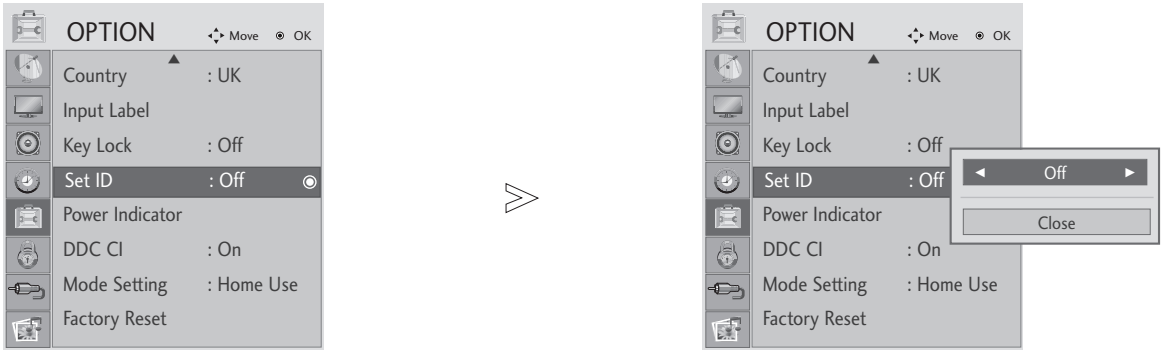
	PC	TV	
RXD	2	3	TXD
TXD	3	2	RXD
GND	5	5	GND
DTR	4	6	DSR
DSR	6	4	DTR
RTS	7	8	CTS
CTS	8	7	RTS
	D-Sub 9	D-Sub 9	

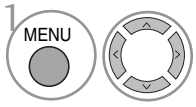
3-Wire Configurations(Not standard)

	PC	TV	
RXD	2	3	TXD
TXD	3	2	RXD
GND	5	5	GND
DTR	4	6	DTR
DSR	6	4	DSR
RTS	7	7	RTS
CTS	8	8	CTS
	D-Sub 9	D-Sub 9	

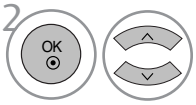
Set ID

Use this function to specify a set ID number.
Refer to 'Real Data Mapping'. ► p.121

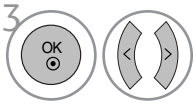




Select **OPTION**.



Select **Set ID**.



adjust **Set ID** to choose the desired TV ID number.
The adjustment range of SET ID is 1~99.

- Press the MENU or EXIT button to close the menu window.
- Press the RETURN button to move to the previous menu screen.

Communication Parameters

- Baud rate : 9600 bps (UART)
- Data length : 8 bits
- Parity : None
- Stop bit : 1 bit
- Communication code : ASCII code
- Use a crossed (reverse) cable.

Command Reference List

	COMMAND 1	COMMAND 2	DATA (Hexadecimal)
01. Power	k	a	00 ~ 01
02. Aspect Ratio	k	c	Refer to p. 119
03. Screen Mute	k	d	00 ~ 01
04. Volume Mute	k	e	00 ~ 01
05. Volume Control	k	f	00 ~ 64
06. Contrast	k	g	00 ~ 64
07. Brightness	k	h	00 ~ 64
08. Colour	k	i	00 ~ 64
09. Tint	k	j	00 ~ 64
10. Sharpness	k	k	00 ~ 64
11. OSD Select	k	l	00 ~ 01
12. Remote control lock mode	k	m	00 ~ 01
13. Treble	k	r	00 ~ 64
14. Bass	k	s	00 ~ 64
15. Balance	k	t	00 ~ 64
16. Colour Temperature	k	u	00 ~ 06
17. Auto Configure	j	u	01
18. Tune Command	m	a	Refer to p. 121
19. Programme momory/Skip	m	b	00 ~ 01
20. Key	m	c	Key Code
21. Control Backlight	m	g	00 ~ 64
22. Input select (Main)	x	b	Refer to p. 121

* When setting 15 ~ 22, a menu does not appear on screen.

Transmission / Receiving Protocol

Transmission

[Command1][Command2][ ][Set ID][ ][Data][Cr]

* [Command 1] : First command to control the TV. (j, k, m or x)
* [Command 2] : Second command to control the TV.
* [Set ID] : You can adjust the set ID to choose desired monitor ID number in option menu. Adjustment range is 1 ~ 99. When selecting Set ID '0', every connected set is controlled. Set ID is indicated as decimal (1~99) on menu and as Hexa decimal (0x0~0x63) on transmission/ receiving protocol.
* [DATA] : To transmit command data. Transmit 'FF' data to read status of command.
* [Cr] : Carriage Return ASCII code '0x0D'
* [ ] : ASCII code 'space (0x20)'

OK Acknowledgement

[Command2][ ][Set ID][ ][OK][Data][x]

* The TV transmits ACK (acknowledgement) based on this format when receiving normal data. At this time, if the data is in data read mode, it indicates present status data. If the data is in data write mode, it returns the data of the PC computer.

Error Acknowledgement

[Command2][ ][Set ID][ ][NG][Data][x]

* The TV transmits ACK (acknowledgement) based on this format when receiving abnormal data from nonviable functions or communication errors.

APPENDIX

01. Power (Command: k a)

▶ To control Power On/Off of the TV.

Transmission

[k] [a] [ ] [Set ID] [ ] [Data] [Cr]

Data 00 : Power Off 01 : Power On

Ack

[a] [ ] [Set ID] [ ] [OK/NG] [Data] [x]

02. Aspect Ratio (Command: k c) (Main Picture Size)

▶ To adjust the screen format. (Main picture format)
You can also adjust the screen format using the **Aspect Ratio** in the PICTURE menu.
(1) ATV, AV1,2,3 Input mode
- 16:9 / Original / 4:3 / 14:9 / Cinema Zoom / Zoom / Full Wide

(2) DTV
- 16:9 / Just Scan / Original / 4:3 / 14:9 / Cinema Zoom / Zoom

(3) RGB, DVI, HDMI Input (HDMI-PC) mode
- 4:3 / 16:9

(4) Component, HDMI input (not HDMI-PC) mode
- 16:9 / 4:3 / 14:9 / Cinema Zoom / Zoom (Just Scan : Only 720p over)

Transmission

[k] [c] [ ] [Set ID] [ ] [Data] [Cr]

Data 01 : Normal screen (4:3) 07 : 14:9
02 : Wide screen (16:9) 09 : Just Scan
04 : Zoom 0B : Full Wide
06 : Original 10~1F : Cinema Zom 1~16

Ack

[c] [ ] [Set ID] [ ] [OK/NG] [Data] [x]

03. Screen Mute (Command: k d)

▶ To select screen mute on/off.

Transmission

[k] [d] [ ] [Set ID] [ ] [Data] [Cr]

Data 00 : Screen mute off (Picture on)
01 : Screen mute on (Picture off)

Ack

[d] [ ] [Set ID] [ ] [OK/NG] [Data] [x]

04. Volume Mute (Command: k e)

▶ To control volume mute on/off.
You can also adjust mute using the MUTE button on remote control.

Transmission

[k] [e] [ ] [Set ID] [ ] [Data] [Cr]

Data 00 : Volume mute on (Volume off)
01 : Volume mute off (Volume on)

Ack

[e] [ ] [Set ID] [ ] [OK/NG] [Data] [x]

05. Volume Control (Command: k f)

▶ To adjust volume.
You can also adjust volume with the VOLUME buttons on remote control.

Transmission

[k] [f] [ ] [Set ID] [ ] [Data] [Cr]

Data Min : 00 ~ Max : 64
* Refer to 'Real data mapping'. See page 121.

Ack

[f] [ ] [Set ID] [ ] [OK/NG] [Data] [x]

06. Contrast (Command: k g)

▶ To adjust screen contrast.
You can also adjust contrast in the PICTURE menu.

Transmission

[k] [g] [ ] [Set ID] [ ] [Data] [Cr]

Data Min : 00 ~ Max : 64
* Refer to 'Real data mapping'. See page 121.

Ack

[g] [ ] [Set ID] [ ] [OK/NG] [Data] [x]

07. Brightness (Command: k h)

▶ To adjust screen brightness.
You can also adjust brightness in the PICTURE menu.

Transmission

[k] [h] [ ] [Set ID] [ ] [Data] [Cr]

Data Min : 00 ~ Max : 64
* Refer to 'Real data mapping'. See page 121.

Ack

[h] [ ] [Set ID] [ ] [OK/NG] [Data] [x]

08. Colour (Command: k i)

▶ To adjust the screen colour.
You can also adjust colour in the PICTURE menu.

Transmission

[k] [i] [ ] [Set ID] [ ] [Data] [Cr]

Data Min : 00 ~ Max : 64
* Refer to 'Real data mapping'. See page 121.

Ack

[i] [ ] [Set ID] [ ] [OK/NG] [Data] [x]

09. Tint (Command: k j)

▶ To adjust the screen tint.
You can also adjust tint in the PICTURE menu.

Transmission

[k] [j] [ ] [Set ID] [ ] [Data] [Cr]

Data Min : 00 ~ Max : 64
* Refer to 'Real data mapping'. See page 121.

Ack

[j] [ ] [Set ID] [ ] [OK/NG] [Data] [x]

10. Sharpness (Command: k k)

▶ To adjust the screen sharpness.
You can also adjust sharpness in the PICTURE menu.

Transmission

[k] [k] [ ] [Set ID] [ ] [Data] [Cr]

Data Min : 00 ~ Max : 64
* Refer to 'Real data mapping'. See page 121.

Ack

[k] [ ] [Set ID] [ ] [OK/NG] [Data] [x]

11. OSD Select (Command: k l)

▶ To select OSD (On Screen Display) on/off when controlling remotely.

Transmission

[k] [l] [ ] [Set ID] [ ] [Data] [Cr]

Data 00 : OSD off 01 : OSD on

Ack

[l] [ ] [Set ID] [ ] [OK/NG] [Data] [x]

12. Remote control lock mode (Command: k m)

▶ To lock the front panel controls on the monitor and remote control.

Transmission

[k] [m] [ ] [Set ID] [ ] [Data] [Cr]

Data 00 : Lock off 01 : Lock on

Ack

[m] [ ] [Set ID] [ ] [OK/NG] [Data] [x]

* If you are not using the remote control, use this mode. When main power is on/off, external control lock is released.

13. Treble (Command: k r)

▶ To adjust treble.
You can also adjust treble in the AUDIO menu.
In case that SRS TruSurround HD is 'On', it doesn't operate and is fixed to 50.
No operation at USB input

Transmission

[k] [r] [ ] [Set ID] [ ] [Data] [Cr]

Data Min : 00 ~ Max : 64
* Refer to 'Real data mapping'. See page 121.

Ack

[r] [ ] [Set ID] [ ] [OK] [Data] [x]

14. Bass (Command: k s)

▶ To adjust Bass.
You can also adjust bass in the AUDIO menu.
In case that SRS TruSurround HD is 'On', it doesn't operate and is fixed to 50.
No operation at USB input

Transmission

[k] [s] [ ] [Set ID] [ ] [Data] [Cr]

Data Min : 00 ~ Max : 64
* Refer to 'Real data mapping'. See page 121.

Ack

[s] [ ] [Set ID] [ ] [OK] [Data] [x]

15. Balance (Command: k t)

▶ To adjust balance.
You can also adjust balance in the AUDIO menu.

Transmission

[k] [t] [ ] [Set ID] [ ] [Data] [Cr]

Data Min : 00 ~ Max : 64
* Refer to 'Real data mapping'. See page 121.

Ack

[t] [ ] [Set ID] [ ] [OK/NG] [Data] [x]

16. Colour Temperature (Command: k u)

▶ To adjust colour temperature. You can also adjust Colour Temperature in the PICTURE menu.

Transmission

[k] [u] [ ] [Set ID] [ ] [Data] [Cr]

Data 00: Medium 01: Cool 02: Warm(not RGB DVI mode)
05:9300K 06:6500K(Only RGB DVI mode)

Ack

[u] [ ] [Set ID] [ ] [OK/NG] [Data] [x]

17. Auto Configure (Command: j u)

▶ To adjust picture position and minimize image shaking automatically. It works only in RGB (PC) mode.

Transmission

[j][u][ ][Set ID][ ][Data][Cr]

Data 01: To set

Ack

[u][ ][Set ID][ ][OK/NG][Data][x]

*** Real data mapping**

00 : Step 0
A : Step 10 (Set ID 10)
F : Step 15 (Set ID 15)
10 : Step 16 (Set ID 16)
64 : Step 100
6E : Step 110
73 : Step 115
74 : Step 116
C7 : Step 199
FE : Step 254
FF : Step 255

18. Tune Command (Command: m a)

▶ Select channel to following physical number.

Transmission

[m][a][ ][Set ID][ ][Data0][ ][Data1][ ][Data2][Cr]

Data 00 : High channel data
Data 01 : Low channel data
ex. No. 47 -> 00 2F (2FH)
No. 394 -> 01 88 (188H),
DTV No. 0 -> Don't care
Data 02 : 0x00 : ATV, 0x10 : DTV, 0x20 : Radio

Channel data range
Analogue - Min: 00 ~ Max: 63 (0~99)
Digital - Min: 00 ~ Max: 3E7 (0~999)

Ack

[a][ ][Set ID][ ][OK/NG][Data][x]

Data Min: 00 ~ Max: 7DH

19. Programme memory/Skip (Command: m b)

▶ To set skip status for the current Programme.

Transmission

[m][b][ ][Set ID][ ][Data][Cr]

Data 00 : Skip
01 : Memory

Ack

[b][ ][Set ID][ ][OK/NG][Data][x]

20. Key (Command : m c)

▶ To send IR remote key code.

Transmission

[m][c][ ][Set ID][ ][Data][Cr]

Data Key code - Refer to page 115.

Ack

[c][ ][Set ID][ ][OK/NG][Data][x]

21. Control Backlight (Command: m g)

▶ To Control the backlight. **(Only Auto Bright Off)**

Transmission

[m][g][ ][Set ID][ ][Data][Cr]

Data : Min: 00 ~ Max: 64 (*transmit by hexadecimal code)

Ack

[g][ ][Set ID][ ][OK/NG][Data][x]

22. Input select (Command: x b) (Main Picture Input)

▶ To select input source for main picture.

Transmission

[x][b][ ][Set ID][ ][Data][Cr]

Data Structure

MSB LSB

0	0	0	0	0	0	0	0

External Input — Input Number

External Input				Data
0	0	0	0	DTV
0	0	0	1	Analogue
0	0	1	0	AV
0	1	0	0	Component
0	1	1	0	RGB
1	0	0	0	DVI
1	0	0	1	HDMI

Input Number				Data
0	0	0	0	Input1
0	0	0	1	Input2
0	0	1	0	Input3

Ack

[b][ ][Set ID][ ][OK/NG][Data][x]

UK Only

When does switchover happen?

*Copeland switches on October 17, 2007

The exact date you switch depends on the transmitter you are served by. To check when you switch, go to Digital UK's postcode checker on www.digitaluk.co.uk

Check your ITV news service or look at Teletext page 106 to see what TV region you're in.

Visit us at **digitaluk.co.uk** call us on **0845 6 50 50 50†**

†Calls charged at BT rate of 3p per minute daytime and 1p per minute evenings and weekends. Rates may vary for calls from non-BT lines.

Keep this important information about how to re-tune your TV during the digital TV switchover

Keep this leaflet and your instruction manual safe – you'll need them

get set for digital

Television in the UK is going digital, bringing us all more choice and new services. Starting in late 2007 and ending in 2012, television services in the UK will go completely digital, TV region by TV region.

Please see overleaf to find out when your area switches to digital.

Digital UK is the independent, non-profit organisation leading the process of digital TV switchover in the UK. Digital UK provides impartial information on what people need to do to prepare for the move to digital, and when they need to do it.

How the switchover affects your TV equipment:

Your new TV has a digital tuner built in, which means it is ready to receive the Freeview signal by simply plugging it into your aerial socket (check if you can get digital TV through your aerial now, or whether you'll have to wait until switchover, at **www.digitaluk.co.uk**).

When the TV switchover happens in your area, there are at least two occasions when you will need to re-tune your TV in order to continue receiving your existing TV channels, and also to pick up new ones. Digital UK, the body leading the digital TV switchover, will advise you when you need to re-tune during the switchover.

If you choose to connect your TV to satellite or cable with a digital box then it will not be affected by switchover, and you won't need to re-tune.

How to re-tune:

To find out how to re-tune your TV, check your manufacturer's instructions for details. Or see below for a typical sequence:

1. With your TV in digital TV mode, press 'Menu' on your remote control. (Some TVs will ask you for a code. If you have not already changed it, the default code is usually 0000, or check your instruction book.)
2. From the Menu options on screen, select 'SETUP'. Select 'Auto Tuning'* to re-tune your digital TV (not 'add channels'). You may have to wait a couple of minutes for the re-tune to complete.

*Also sometimes referred to as 'Update', 'Rescan', 'Replace', 'Auto-Tuning', 'Channel Search', 'First Time Install', or 'Store Channels'.

3. If you do not re-tune your channels when advised to do so by Digital UK, you may lose some or all of your channels until you do re-tune. You should re-tune your TV every few months to check for any new channels.

If you are missing any channels, it may be that they are not available in your area, or that your aerial needs upgrading.

If you have any questions, please contact your equipment supplier or call Digital UK on **0845 6 50 50 50** or visit **www.digitaluk.co.uk**

Make sure to read the Safety Precautions before using the product.
Keep the Owner's Manual(CD) in an accessible place for furture reference.
The model and serial number of the SET is located on the back and one side of the SET. Record it below should you ever need service.

MODEL _____

SERIAL _____